AFRICAN IRONMAKING CULTURE AMONG AFRICAN AMERICAN IRONWORKERS IN WESTERN MARYLAND, 1760-1850

A thesis submitted to the faculty of San Francisco State University in partial fulfillment of the requirements for the degree

Master of Arts in Ethnic Studies

by

Jean Libby

San Francisco, California

May, 1991

revised July, 1991 for personal distribution

Copyright by Jean Libby 1991

CERTIFICATION OF APPROVAL

I certify that I have read African Ironmaking Culture
Among African American Ironworkers in Western Maryland
1760-1850, by Jean Libby, and that in my opinion this
work meets the criteria for approving a thesis
submitted in partial fulfillment of the requirements
for the degree: Master of Arts in Ethnic Studies
at San Francisco State University.

A. X. Yansané

Professor of Ethnic Studies and International Relations

J./T. Johnson

Professor of Journalism

Mary R. Hoover

Professor of Ethnic Studies

and Black Studies

Angela Y. Davis

Lecturer, Women's Studies

and Ethnic Studies

AFRICAN IRONMAKING CULTURE AMONG AFRICAN AMERICAN IRONWORKERS IN WESTERN MARYLAND, 1760 - 1850

Jean Libby

San Francisco State University 1991

ABSTRACT: This thesis investigates technological transfer (diffusion) of African ironmaking culture into western Maryland by enslaved ironworkers. The major method is comparison with ironmaking societies in West Africa at the time of enslavement, looking for similarities to furnace technology and cultural practices. The slave worker furnace population is described demographically at census intervals. African American autobiographies, archaeological data, census manuscripts, legal records, and advertisements are the primary sources used to describe the group.

Conclusions: Technological diffusion occurred and occupational identity increased when workers made iron with methods similar to African traditions. Their expertise was suited to forge work, where there is evidence in records that slaves were clustered. Resistance to slavery is a vital part of their history, based on African group self-congruity and mutual aid as much as the assimilation of European culture.

author's address: 1222 Fulton St. Palo Alto, CA 94301

ACKNOWLEDGMENTS

I would like to express gratitude first to John Frye, archivist of Washington County, Maryland, for sharing his knowledge and fascination with ironworks history; to West Virginia ironworks researchers Bill Theriault and Michael Thompson; to John Snowden of Harpers Ferry and Elizabeth Anderson of Thurmont for their privately published books. Ann Lebherz of the Frederick County Historical Society and ironworkers descendent Dean Colimer are due special thanks.

Anthropologist Jennifer Kelley, archaeologists Schenck and Susan Frye, and archivist Linda McCurdy were generous with original ideas and publications. anthropologist Lesley Rankin-Hill gave advice at a critical time; archaeologist Ronald Thomas of the Maryland Trust photographed artifacts; anthropologists Michael Stewart and Peter Weil, and historian David Curtis Skaggs gave publication permissions. encouragement and The warm assistance of Lucia Stanton, archivist at Thomas Jefferson's home, Monticello, is appreciated.

To the congregations of Mt. Moriah Baptist Church in Maryland, Asbury United Methodist Church in West Virginia, and the Iron Hill Church of God in Delaware, thank you.

I found spiritual sustenance as well as history.

The continued guidance of the congregation of Ebenezer AME Church in Hagerstown, Maryland is essential for this study. The late Viola Mae Steward of Ebenezer AME provided a photograph of the church before its 1910 remodeling.

Special gratitude is due the retired associate pastor of Ebenezer AME Church in Hagerstown, Reverend Leonard W. Curlin. As a young man Mr. Curlin saw Marcus Garvey march in New York, met W.E.B. DuBois in Atlanta, and saved the John Brown Farm (his antislavery headquarters) in Maryland.

At the University of California, Berkeley, I thank these professors for kind encouragement and research leads: David Blackwell, James Deetz, Sheila Johansson, Michel Laguerre, Earl Lewis, and Roy Thomas; and Phyllis Bischof, bibliographer of the Africana Collection there. Roger Bonilla at the Palo Alto City Library made research material available quickly.

I would like to thank my advisers at San Francisco State University: A. Y. Yansané, whose work on West African universals brought me here to study; John T. (Tom) Johnson, for guiding this work into coherence; Mary Hoover, not only a professor but an associate from the civil rights movement; Angela Y. Davis, for her insight and unparalleled expertise.

This would not be complete without help from my family, Tom and Nalini Libby, Beth Libby, Gregory and Clare Loops, and the next generation, already begun. Ralph Libby is a great reference librarian as well as supportive husband.

TABLE OF CONTENTS

List o	f Tables ${f v}$	iii
List o	f Figures	ix
List o	f Appendices	x
Introd	uction	1
	ethodologyithodologyithodology	4 7
	r one. The world left behind: African ironmaking 17th and 18th centuries	11
	r two. African ironmaking in western Maryland in a of the American Revolution, 1760-1800	27
T	he burials at Catoctin Furnace	43
ironma T	r three. Changes and resistance: African American king communities in western Maryland, 1810-1850 homas W. Henry, blacksmith - minister	57 62 68
\longrightarrow A_{α}	sions	85
I	nterviews	
Refere	nces	97

LIST OF TABLES

Tabl	e	Page
1.	Eight Negroes in the inventory of Barnabus Hughes, Antietam Furnace, 1766	36
2.1	Twenty-five slaves mortgaged by Fielder Gaunt, Frederick County, to Caleb Dorsey Jr., Anne Arundel County, 1766	37
2.2	Nineteen slaves at Fielderea Furnace sold to Thomas Smith and John Cox of Philadelphia, 1766	37
3.1	Twenty-six Negro men slaves employed at Occuquan Forge	50
3.2	Ten Negro women slaves employed at Occuquan Forge	50
4.1	Thirteen Negro men employed at Keep Tryst Furnace	50
4.2	Two Negro boys and one Mulatto man employed at Keep Tryst Furnace	50
4.3	Four Negro women and one Negro girl employed at Keep Tryst Furnace	50
5.1	Age and gender distribution of slaves at Antietam Ironworks, 1830, 1840	79
5.2	Age and gender distribution of slaves at Catoctin Furnace, 1830, 1840	79
6.	Forty-nine slaves held by John McPherson Brien sold in 1848	80

LIST OF FIGURES

Figu	re	Page
1.	Map of West African peoples and states, 15th to 17th centuries	10
2.	West African iron furnaces	15
3.	The furnace at Kamalia drawn by Mungo Park	19
4.	Maryland iron furnaces juxtaposed on earlier American Indian settlements and mining sites	26
5.	American pig iron furnace	35
6.	Map of iron furnaces in colonial America	38
7.	Map of iron furnaces in revolutionary America	39
8.	Forge and furnace workers held by the Johnson brothers, 1790 and 1800	43
9.	The Potomac world of John Semple	49
10.	Slaves at Antietam Ironworks during Henderson ownership, 1782 - 1806	52
11.	Antietam Ironworks lands	53
12.	Isaac Jefferson, blacksmith	56
13.	Washington County views of Rev. Thomas W. Henry	67
14.	James W. C. Pennington	70
15.	Slaves at Antietam Ironworks in 1820	76

LIST OF APPENDICES

Appendix	1.	Photographs	• • • • • • • • • • • • • • • • • • • •	• • •	• • • • •	 • • • •	8	3 6
Appendix	2.	Interviews .		• • •	• • • •	 	8	39
Afri	car	n American au	tobiographies			 • • • • •	9	Э (

INTRODUCTION

Looking past the mouth of the Antietam Creek as it flows into the Potomac River in western Maryland, the careful eye can discern the remains of a dam and millrace that powered an ironworks at the time of the American Revolution and a half century thereafter, whose labor force was predominantly African in origin. The charcoal iron industry in Maryland and Virginia used mostly slave workers for a hundred years, creating large colonial exports and then munitions for the Revolutionary War, and basic life necessities such as stoves and cooking pots and nails.

The ruins of this once-active industrial center lie within the battle theatre of the Civil War; the heights that supplied the wood to fuel the furnace is across the Potomac from Harpers Ferry, West Virginia.

The Autobiography of Rev. Thomas W. Henry of the AME Church, in the Moorland-Spingarn Research Center at Howard University in Washington D.C., details his pastorate of the slave ironworkers during the 1830s at Antietam Ironworks. The first significance of Rev. Thomas Henry's memoirs to me was his near-arrest in 1859 because his name was found on a piece of paper in the pocket of John Brown, the militant abolitionist jailed and soon to hang in (then) Virginia.

Even at the moment of discovery of the only known primary source of John Brown's raid written by a local black person, I was equally excited by the African Methodist Episcopal minister's story of another "insurrection" -- a fight between slave workers and white workers and their manager at Antietam Ironworks twenty years earlier (Libby 1978). Thomas Henry also described work of women at the furnace, with the startling observation that wives of the slave workers often were free. Where did these women come from? What documentation of their history could be found?

The archivist for the western Maryland history collection at the Washington County Free Library, John Frye, (who is also a National Park Service historical interpreter) brought me to the ironworks site on the Antietam Creek. We could see the place where Stuttering Pete, defending a skilled slave with considerable responsibility at the furnace, threw a white workman who was harassing him across the millrace. Just downstream an 1840 aqueduct leads the Chesapeake and Ohio Canal, now filled with hikers and bicyclists instead of flatbottomed cargo boats, across the juncture of the Antietam Creek with the Potomac waters. The Indians who mined the rhyolite deposits for tool workshops here called it The River of Wild Geese (Stewart 1989).

Completely enthralled with iron industry history in the area, I came as often as possible in the late 1970s and early 1980s to hike and ramble and wonder.

The original subject of my research, local black participation in John Brown's raid (Libby 1979; 1986), became much broader as I learned more of the lives of people in the community from the past and present.

After entering the Afro-American Studies program at the University of California, Berkeley in 1983, I learned of the superior traditional African iron technology that is still known among elders (Schmidt and Avery 1978).

Then I read of the excavation of a slave cemetery at Catoctin Furnace, just across the Blue Ridge Mountains near Frederick, Maryland. The late Lawrence Angel, pathologist at the Smithsonian Institution, found that the people interred were unmixed Africans (Parrington and Robinson 1984). Here were pieces to fit with the Rev. Thomas Henry's description of the daily lives of slave ironworkers at the Antietam Ironworks. Both operations had the same ownership.

I selected San Francisco State University for research direction after reading the work of Ethnic Studies Professor A. Y. Yansané, "Cultural, political, and economic universals in West Africa" (1985). Three more advisors contributed valued criticism: Professor of Journalism J.T. (Tom) Johnson painstakingly edited several drafts; Black Studies Professor Mary R. Hoover provided guidance; Women's Studies and Philosophy Professor Angela Y. Davis made suggestions on slave resistance and the experiences of women, with research impetus gained from her class on Afro-American women's history.

METHODOLOGY

My principal methodology was to find the archaeologists and anthropologists who worked on the Catoctin Furnace excavation and subsequent studies and interview them -- in person, by telephone, or correspondence. In 1989, a San Diego meeting of the American Association of Physical Anthropologists brought a number of them to one place.

Interpretation of the technological ironmaking process in western Maryland relied upon field trips, interviews, and specific studies. My first contact was Jennifer Kelley (1983,1987) assistant to Dr. Lawrence Angel at the Smithsonian Institution, who completed their data examinations for publication. Discussion with metallurgical archaeologist Helen Schenck (1982,1983,1985), who examined the Catoctin Furnace artifacts, brought the clearest understanding of the technology of the slaves' tasks at the furnaces and forges. Her interest in further research for evidence of African technology in the Catoctin Furnace artifacts is heartening corroboration of the validity of the idea of technological transfer by the slave workers.

Local history experts and longtime residents were consulted for the details and understanding that only those who live in the community and are themselves part of its history can provide.

discipline of Ethnic Studies The requires authoritative viewpoint from within the group. For African Americans, this historic documentation autobiographies. Renowned scholars, such as Henry Louis Gates at Duke University and Margaret Wilkerson at the University of specialize in developing this interpretive California, academic criteria. Alex Haley's Roots (1976) depended not only on oral history, but the written story of Olaudah Equiano ([1791]1985), a captured African brought to America.

For this thesis, the two principal autobiographies are those of Rev. Thomas Henry (1872) and Rev. J.W.C. Pennington ([1850]1971). The more generally known autobiography of Pennington, The Fugitive Blacksmith, tells the story of his escape from slavery from a farm in Washington County near the Antietam Ironworks in the 1820s. Rev. Thomas Henry was also a young slave blacksmith in Washington County until freed by the slaveholder's will.

A third African American source is the reminiscence of Isaac Jefferson, whose photographic image often portrays a blacksmith of the time ([1840]1951). His and other ironworkers experiences at Monticello describe a nonbenign slaveholder.

Primary sources of African Americans include census manuscripts, runaway slave advertisements, wills, deed records, letters, and diaries of European Americans. The archaeological record of the Catoctin Furnace excavation is interpreted for cultural African influences.

Consideration of diffusion of African skills into the technology at furnaces where the enslaved workers predominated is made with an important caveat: techniques synthesized with European ones and did not re-create the African system of iron smelting. Transference was as much (or more) a cultural one. Elements for comparison with African origins are occupational ethos and family structure.

Study of the group rather than individuals is another imperative of African American scholarship. This methodology was expressed by Filomina Steady at a seminar on Research on African Women: "The minimal social grouping in Africa is often the larger kin group ... clan group identification takes precedence over gender identification" (1983,18). Thomas Holt of the Michigan Center for Afroamerican and African Studies states: "Much of recent scholarship has shown that the slave's conception of self, his very dignity ... grew out of his interaction within the slave community ..." (1987,56)

Throughout this thesis attention is called to the importance of occupational identification among artisan slaves which provided <u>self-congruity</u>, a contemporary term in behaviorial science studies on the biological need for internal cultural cognizance (Sirgy 1986; Germana 1989).

My study is African influences on charcoal ironmaking technology in western Maryland, and the demographic and social characteristics of the African American communities centered around these furnaces.

LITERATURE REVIEW

There is a wealth of published sources on African iron smelting and blacksmith culture by international scholars. The metallurgical characteristics are well-defined by the anthropologist and engineer team of Peter Schmidt and Donald Avery (1978, 1979) and by Nikolaas Van der Mwere (1980). keeping with the primary source emphasis of this study, I chose to include the accounts of the Scottish traveler Mungo Park (1800)and African Bishop Samuel Ajayi Crowther ([1855]1970). New translations of early European travelers' accounts were of great assistance (Marees [1602]1987; Romer While foreign travelers are often biased [1760]1965). observers of any society, the consistent praise of African iron technology by these chroniclers cannot be overlooked.

The profound cultural and spiritual values of African ironmaking are a frequent topic of scholarship. This work uses primarily McNaughton (1988), Fernandez (1982), Abraham (1962) and Zahan (1979). A 1987 film by African director Souleymane Cissé, Yeelen (Brightness), shows the cultural and spiritual values of iron smelting based on historical legend among the Bambara. The study of Ogun, god of iron among the Yoruba and others in West Africa by Sandra Barnes (1980,1989), reveals an elastic basis for sacred technological transfer.

History of the specific furnaces in western Maryland is found among local sources. The most-cited among these is Michael D. Thompson's monograph, The Iron Industry in Western

Maryland (1976). He wrote this material as an aid to interpretation of the local iron industry while he was a National Park Service guide. Now Michael Thompson is the prosecuting attorney for Jefferson County, in Charles Town, West Virginia. Another of his historical contributions is a complete cross-indexing of wills, deeds, and land records for the county, which was originally part of Virginia. As Charles Town is the place where John Brown was tried ("that would have been my job if he were here today," Thompson admits), it is more than a local records guide.

Other local historians are equally demanding of themselves in historical accuracy and are, through their patient explanations as well as publications, the main sources for the specific ironworks history: William Theriault (1989) of Shepherdstown, West Virginia, and Elizabeth Y. Anderson (1985) of Thurmont, Maryland. All of the information from county records on slaves came from the original research of Michael D. Thompson, William Theriault, Elizabeth Y. Anderson, Ann Lebherz of Middletown, Maryland, and Susan Winter Frye (1984,1988), an archaeologist at the National Park Service in Harpers Ferry.

General works on industrial, ironworking, and artisan slaves provide the broad base for this specific application. The scholarship of Ronald Lewis (1977,1979), Robert Starobin (1970,1978), and Allan Kulikoff, whose *Tobacco and Slaves* (1986) has much about ironworkers, make this study possible.

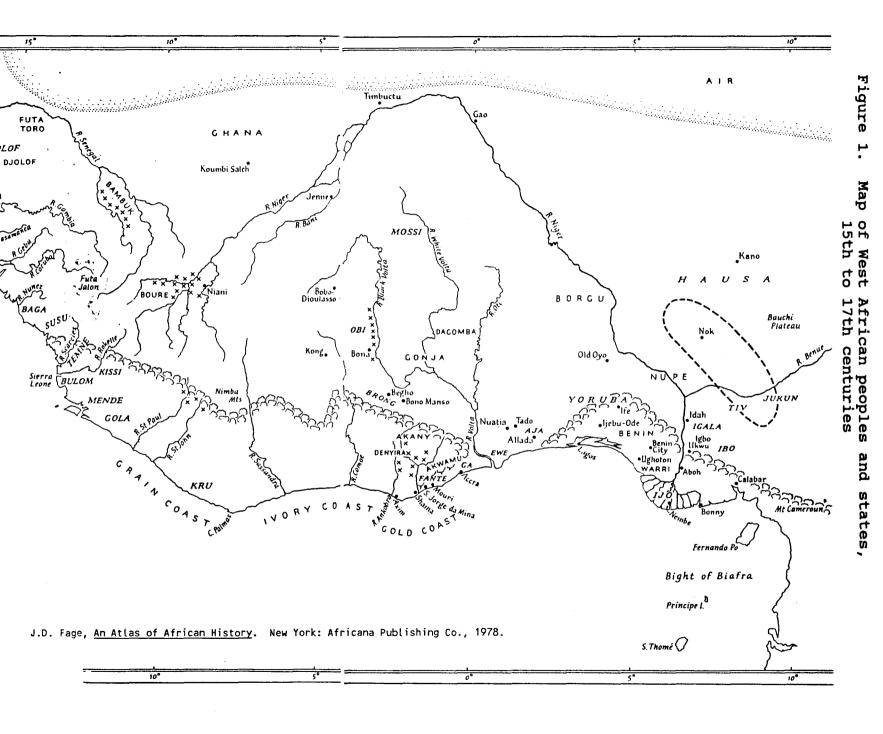
Historian Charles Dew (1974) has arranged the microfilming of southern iron furnace company records so that they can be readily available. His forthcoming book on black ironworkers at Buffalo Forge is eagerly awaited. Works by Maryland social history specialists Ira Berlin (1982,1983) and David Curtis Skaggs (1973,1984) were often utilized. A study of emigration of British workers in 1841 by Charlotte J. Erickson of Cambridge University is developmental (1989,1990).

There are works in black history by renowned scholars without whose pioneering studies a legitimate discipline would not be underway. For this thesis the black artisan studies of W.E.B. DuBois ([1902]1978), histories by Benjamin Quarles (1961,1969,1983) which tell the meaning of black churches, and the History of Black Americans from Africa to the Emergence of the Cotton Kingdom by Philip S. Foner (1975) are seminal.

This thesis focuses on resistance to slavery by the ironworkers. Lathan A. Windley compiled the 18th century runaway slave advertisements as a primary source for researchers (1983). The most provocative work in this area was the Ph.D. dissertation of Julius Scott, "The Common Wind: Currents of Afro-American Communication in the Era of the Haitian Revolution" (1986). Scott analyzes political changes among African Americans due to this hemispheric experience.

Conclusions are presented in the hope of stimulating discussion and further research. African contributions to American society are part of the heritage we all share.





CHAPTER ONE

THE WORLD LEFT BEHIND: AFRICAN IRONMAKING IN THE 17TH AND 18TH CENTURIES

The smelting of iron in West Africa is a sacred science of great ritual and power. It is an indigenous and ancient process, which propelled subsistence agricultural groups into civilizations using tools of iron. The West African land within the curve of the Niger River is probably among the first areas on earth to independently develop societies (Drake 1986, 127; McIntosh and McIntosh 1988, 158).

There is considerable academic debate on whether African iron smelting was original or the result of diffusion (Diop 1974,87-89; Kense 1985; Grébénart 1988). This thesis depends upon the viewpoint accepted by most scholars that, whatever the original source of smelting iron in West Africa, it was infused with innovative techniques that represent a fully African culture. The effect was one of advancing urban society (Rustad 1980,242-243; Bohannan 1964,88). Iron technology in Africa nearly died during the four hundred years of commercial slavery and colonialism (1500s to the 1960s) because of the chaos engendered by the slave trade, and then by fiat of European colonial powers which committed cultural genocide by making African iron smelting illegal (Makandawire 1978:17; Pole 1982).

Still, in small areas of the hinterlands, a few persons today remember the traditional technology and create iron from the earth. The old spirituality is relived: women in Mali lift their skirts over the still-steaming metal to absorb the vapor and men drink the water that has cooled it (McNaughton 1988,21).

Mande belief requires careful attention to the hyena, guardian of the Earth, during smelting, as extracting a mineral is equivalent to murder of a superior being, part of the mother Earth (Cissé 1964,196 in Herbert 1984,33). In other African societies the process is equated with birth (Maret 1985,77). Elders among the Haya in Tanzania educated Western scientists by making fine steel in demonstrating the hidden cultural process (Schmidt and Avery 1978).

In developing a concise and understandable history of the diverse and complex West Africa and its people, A. Y. Yansané (1985) suggests the term "universals" to apply to conditions which are cross-cultural. Among these are the making of iron and the occupational craft guilds that are in charge of it. The concept of universals is relevant in considering the African origins and personal histories of those descended from Africans brought as slaves to the Americas, when specific locations have been lost.

African ironmakers occupied an independent space in their villages and towns. Iron production was power. This power was controlled through secrecy of the ironmaking process, and religious and artistic functions of the smelters and blacksmiths, which included the circumcision of males at puberty. Participation in ironmaking was inherited and ritually initiated (McNaughton 1988, Cissé 1987).

Many writers call the ironmakers an occupational caste, suggesting groups which supercede one another. Bonnie Wright, with the Wolof of Senegal as her case study, argues that West African caste "is really best understood as a set of groups differentiated by innate capacity or power sources" (1989,42).

Another universal characteristic of West African ironmakers was the occupational clan activities of their wives. Blacksmiths (who were the traditional iron smelters) married potters (Marie-Andre 1939,136; DeCorse 1989,137). Contemporary anthropologists notice this tradition continues in many West African societies -- blacksmiths (who no longer regularly smelt iron) still marry potters, and both groups inherit occupational status (Bryson 1979; Glaze 1981; McNaughton 1988). Just as blacksmiths perform circumcision, the potters perform female excision at puberty rites (McNaughton 1988).

The religious functions of blacksmiths in Africa carry power into all societal levels. As a group outside the predominantly agricultural residents, they became mediators (Maret 1985,79). Any forge is a sanctuary, "the church of the African village," according to anthropologist Dominique Zahan ([1970]1979,30). Among the Fang in Gabon the word for furnace

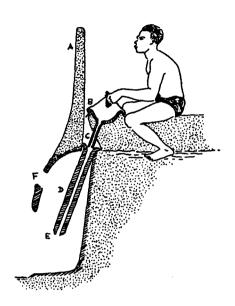
means "mutual aid among men" and the forge has sexual imagery:
"Life and potency can be restored to Banzie by heating up the
chapel-forge of Bwiti identity" (Fernandez 1982:507,514).

The relationship of iron to the larger world was one of importance to all West Africans. The tyi wara ceremony among Bambara is man's relation to iron production and agricultural implements: the sun, moon and earth (Zahan [1970]1979,135). Fache boga oni, a 17th century saying among the Temne pertaining to the universal importance of iron, is found still in use today, according to linguist P.E.H. Hair (1975,81).

The genius of African iron was its steel core, the technology of making a steel interior through temperature control in the smelting with the use of tuyeres, tubes to induct air into the furnace to make it hotter, therby removing carbon (Tylecote 1976, 47; Avery and Schmidt 1979).

Archaeologist Nikolaas Van der Mwere credits iron-producing West Africans who moved southward in the Bantu migration with creating these new processes:

As a result of metallurgical experimentation in many small communities, African iron technology achieved a number of important breakthroughs in the areas of high carbon steel production, the invention of the natural draft furnace, and such processes as the preheating of air (1980:464).



Small-scale production of superior iron using preheated air; Nigeria.

> William Rostoker and Bennet Bronson Pre-industrial iron: its technology and ethnology. 1990.

labarin shaharar garin wajen aikin tama. Ina so in ga yadda su ke yi. Na tafi inda su ke aikin na gani, amma na ga su tasu rahoniyar ta narka tama ta bambanta da irin ta Mandingo.

Da muka tashi muka yi ta tafiya har dare ya yi, kana muka sauke kaya a dokar daji. Cikin dare sai ga kyarkeci

suka zo suka kama jaki guda, suka cinye. Daga inda

Iron furnace in Hausa language book of the travels of Mungo Park; Nigeria.

> Tafiyarsa Karshe, Mungo Park Mabudin Kwara. 1962.

The excellence of West African iron did not go unnoticed by the rest of the world. During the Arab land explorations of medieval times, merchants began trading with Africans using iron as a commodity (Levtzion and Hopkins 1981,127). The Portuguese, sea trading at the beginning of the 16th century, considered African-made iron quality material (Fyfe 1964,29). A hundred years later a Dutch sailor and amateur linguist, Pieter de Marees, described iron implements sold in the marketplace in Benin with high praise ([1602]1987,230).

Like occupational and craft guilds, trading in a sophisticated economic system based upon individual needs and small group participation is another African universal. Women especially were creators of this traditional system (Awe 1972; Sudarkasa 1981; Yansané 1985). Iron trading became integral to this process in international trade. Dade (iron bars, Akan) was a currency unit -- "measured with human feet" -- said de Marees ([1602]1987,11).

The problem for Africans was one of supply. Some saba (ironmakers) in forest areas such as Togo and Cameroon produced enough to supply goods for neighbors (Morgan and Pugh 1969,164; Herbert 1984,316). The complex ironmaking society of Begho, in present-day Ghana, was another vigorous producer active in preslavery times (Anquandah 1981).

But the African superior technology was slow. By the 18th century the British, who had stripped their own island of

its forests making charcoal for iron smelting, were able to increase production after 1750 using anthracite coal to fuel the furnaces (Ashton [1924]1964). The product was not as good, but it was plentiful. The Africans were a ready market: "Iron was to them more precious than gold," said a Danish trader (Romer [1760]1965,3).

Six hundred pounds of bar iron was the West African coastal price for a slave in 1695, captured and delivered from the interior by Africans who could then make more needed tools and implements (Curtin 1971,89). These needed implements soon became weapons, used to consolidate power in the rapidly disrupting societies as they produced more and more slaves to exchange (Roberts 1987; DeBarros 1988). Vast quantities of firearms -- millions, one scholar estimates (Daget 1989,64) -- were partial payment for the Atlantic trade slaves.

How the blacksmiths and ironmakers fared in this upheaval depended upon time and place. A massive migration of African iron miners from Central Africa (especially Angola) to Brazil took place in the 17th century. These miners were selected because of their African skills to build and work Minas Gerais (Baer 1969; Klein 1971,108). Travel writings from Brazil collected by Gilberto Freyre indicate acknowledgement of technical superiority of the African "over the native or even the white man" (1956,310).

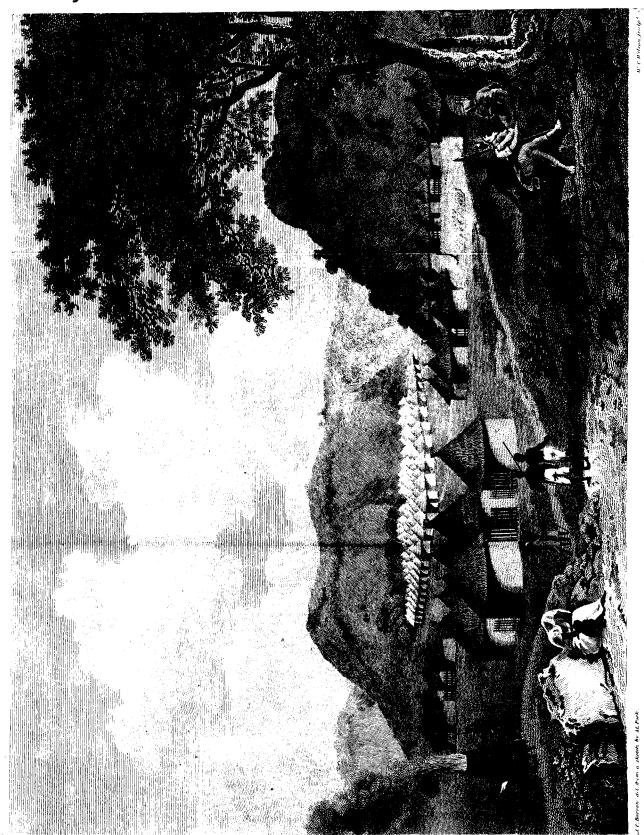
In the early commercial slave trade, slaves sold to Europeans, Arabs, or other Africans were the captives of war.

In some areas, if you could prove you were a blacksmith by creating a tool or making iron, you would not be part of the growing coffles to the coast (Chase 1971,34). However, in other areas this skill made blacksmiths and their wives subject to capture for internal slavery (DeCorse 1989). Amid this anarchy and chaos the technological regression of African iron smelting culture occurred (Rodney 1982,105).

Some societies weakened and others grew stronger, depending upon their relationship with the European commercial slave traders. There were large internal migrations to avoid contact with slave-producing areas (Ajayi 1965). Political instability in the region of the former Mali empire -- from the Atlantic coast between the Senegal and Gambia rivers, and east to the present day borders of Nigeria -- was exacerbated by military and missionary campaigns from the Islamic north at the same time that the slave trade was at its peak (Swift 1983).

Among the slave traders, the only group not at war in the interior areas of West Africa at this time was the Europeans. They were prevented from travel by local rulers and slates (coastal middlemen, the actual transporters of captured people) profiting from the slave trade. Also, unable to withstand malaria, whites did not survive more than a few miles from the coast (Pescatello 1977,13).

Figure 3. The furnace at Kamalia drawn by Mungo Park



Mungo Park, <u>Travels into the Interior of Africa in the Years 1795, 1796, and 1797</u>.

A young physician and botanist from Scotland, Mungo Park, challenged this natural barrier in 1795 when he exposed himself to malaria and recovered, providing him with immunity. While recuperating, he learned the Mandingo language and set out on a journey to find the course of the Niger River. His adventures have been in print since 1799. Mungo Park did not achieve his exploration goal, but the notes and sketches he carried in the crown of his hat -- which miraculously survived when all his other possessions were lost -- told of Africans lives, daily family relations, sickness Befriending Tani, a blacksmith -- protecting celebration. each other as they moved toward the African's home in the interior -- Mungo Park as Tani's honored quest learned how Senegambian Africans made iron.

The Negroes on the coast being cheaply supplied with iron from the European traders, never attempt the manufacturing of this article themselves; but in the inland parts, the natives smelt this useful metal in such quantities, as not only to supply themselves from it with all necessary weapons and instruments, but even to make it an article of commerce with some of the neighboring states. During my stay at Kamalia, there a smelting furnace at a short distance from the hut where I lodged, and the owner and his workmen made no secret about the manner of conducting the operation, readily allowed me to examine the furnace, and assist them in breaking the ironstone. The furnace was a circular tower of clay, about ten feet high and three in diameter, surrounded in two places with withes, to prevent the clay from cracking and falling to pieces by the violence of the heat. Round the lower part, on a level with the ground (but not so low as the bottom of the furnace, which was somewhat concave), were made seven openings, into every one of which were placed three tubes of clay, and the openings again plastered in such a manner that no air could enter the furnace but through the tubes, by the opening and shutting of which they regulated the fire. These tubes were formed

by plastering a mixture of clay and grass round a smooth roller of wood, which, as soon as the clay began to harden, was withdrawn, and the tube left to dry in The ironstone which I saw was very heavy, and ofa dull red colour, with greyish specks; it was broken into pieces about the size of a hen's egg. A bundle of dry wood was first put into the furnace, and covered with a considerable quantity of charcoal, which was brought ready burnt from the woods. Over this was laid a stratum of ironstone, and then another of charcoal, and so on, until the furnace was quite full. was applied through one of the tubes, and blown for some time with bellows made of goats' skins. operation went on very slowly at first, and it was some hours before the flame appeared above the furnace; but after this it burnt with great violence all the first night, and the people who attended put in at times more charcoal. On the day following the fire was not so fierce, and on the second night some of the tubes were withdrawn, and the air allowed to have freer access to the furnace; but the heat was still very great, and a bluish flame rose some feet above the top of the furnace. On the third day from the commencement of the operation, all the tubes were taken out, the ends of many of them being vitrified with the heat; but the metal was not removed until some days afterwards, when the whole was perfectly cool. Part of the furnace was then taken down, and the iron appeared in the form of a large irregular mass, with pieces of charcoal adhering to it. It was sonorous; and when any portion was broken off, the fracture exhibited a granulated appearance, like broken steel. The owner informed me that many parts of this cake were useless, but still there was good iron enough to repay him for his trouble. iron, or rather steel, is formed into various instruments, by being repeatedly heated in a forge, the heat of which is urged by a pair of double bellows, of a very simple construction, being made of two goats' skins, the tubes from which unite before they enter the forge, and supply a constant and very regular blast. The hammer, forceps, and anvil, are all very simple, and the workmanship (particularly in the formation of knives and spears), is not destitute of merit. The iron, indeed, is hard and brittle, and requires much labour before it can be made to answer the purpose. Most of the African blacksmiths are acquainted also with the method of smelting gold, in which process they use an alkaline salt, obtained from a lye of burnt cornstalks evaporated to dryness. They likewise draw the gold into wire, and form it into a variety of ornaments, Some of which are executed with a great deal of taste and ingenuity. (Park 1800,217-218)

Mungo Park made a second journey to find the course of the Niger River in 1806. Acting as an officer of the British Navy, Park used military force to impose European trade supremacy in the interior. He did not survive his second journey (Lupton 1979).

The chaos of the Atlantic slave trade is unimaginable. The human loss to Africa is nearly incalculable -- death resisting capture, death by malnutrition and disease on long forced marches from the interior, death while held in stone forts waiting for sale to Europeans, and death by attempted escape, even wearing chains of iron, while still in Africa. Deaths onboard the slave ships in the infamous Middle Passage to the Americas took at least 15% of the human cargo (Daget 1989,64).

A few captives escaped with the help of militant European abolitionists who seized slave ships on the high seas. The African refugees were brought to missionary schools in coastal Sierra Leone. One of these youths rescued from a ship headed to the Americas in 1822 was Samuel Ajayi Crowther, a Nigerian descended from migrants fleeing war-weakened Old Oyo, one of the earliest indigenous iron-smelting areas on the continent (Ajayi 1967).

The Reverend Samuel Crowther, who became the first African Anglican bishop, assisted in British-sponsored journeys on the Niger and Tshadda Rivers in 1841 and 1855. Like the Dutch seaman Pieter de Marees two hundred fifty years

previous, Crowther compiled a glossary of words and phrases. An iron hoe and metal currency were the same concepts in two African languages ([1855]1970,223). One evidence of local ironmaking which he saw were canoes made of iron which could hold several people, and "seemed to ride very lightly on the surf" (Ibid.,9). This expedition marked the first use of quinine to prevent malaria by the European and the African travelers. It was successful, making the interior of Africa safe for Christianity and colonialism.

The spiritual reserves upon which the enslaved African could call had their source in the traditional religion developed by the community. According to the Ghanian philosopher William E. Abraham, in The Mind of Africa, (1962,52-57) universal elements include a well-ordered, divinely guided society in which the people function for total harmony and well-being. One did not worship the creator, but was a part of the creation.

The human soul, an okra or mission, is important in this concept. The Supreme Creator, Nyame, was directly accessible: "To address him, you speak to the wind." Religious authority was entrusted to those who could intepret and call upon minor deities who do have rites and corporate functions associated with them. These deities can intercede and

¹ Three Yoruba language dictionaries by Crowther are in the Bascom Collection at the Bancroft Library, University of California, Berkeley.

influence the Supreme Creator; a sophisticated set of religious occasions and rites became part of African societies, with the priests (often women) acquiring secular power due to their ability to summon the spiritual forces. It was the loneliness of one's personal destiny (okra) that inspired the elaborate system of priests and minor deities to derive some comfort in the face of this fatality (Abraham 1962,58).

Among the Ibo in Nigeria there also was a single Creator and minor deities, and no places of general public worship. To guard against bad spirits, people visited the graves of their ancestors for individual intercession (Equiano [1791]1985).

The apparent contradiction of the fundamental personal relationship with the Supreme Creator and the communal identity of the rites of African traditional religious observance is considered by Abraham and others. French anthropologist Dominique Zahan sees Africans with a strong sense of individual power: "The mastery of the self is the keystone of all religious architecture of the African ... even though such a personal concept superficially appears to be contrary to African religiousity" ([1970]1979:156).

This personal power of identity then asserts itself in the collective spirit, or *nommo*, of African community (Asante 1987,188-189). This power and striving for harmony can influence the general good or ill of the group and its

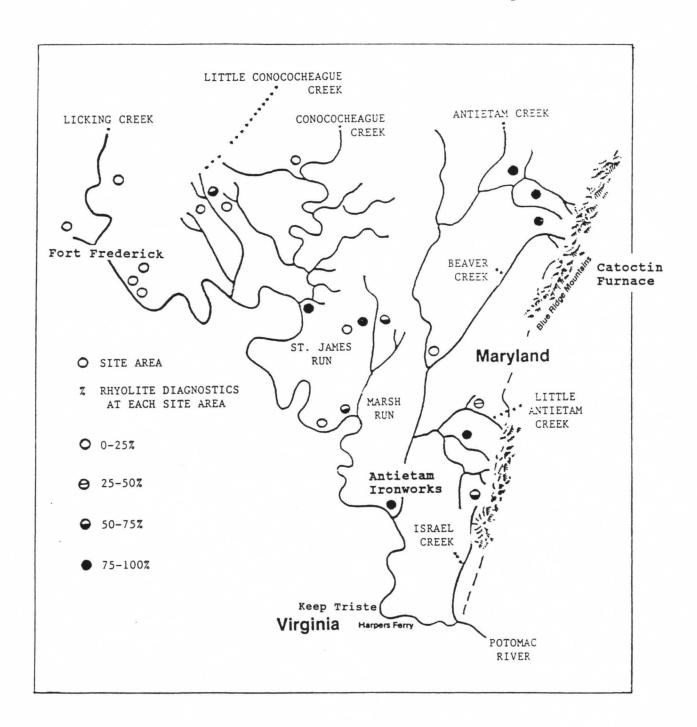
traditional order, of which ironmaking was a significant function. It includes power over spiritual forces, such as the deities who control singular aspects of life. The Fang, in Gabon, call these deities evus. A modern Fang chief related it to the loss of iron production: "Our fathers used evus to advantage. They forged iron! But today the evil evus has triumphed." Another leader of the same society replies: "All the good things which ironworking brought with it -- strength in battle, cooperation among men in production, order in the exchange of women -- have been abandoned as that iron has been abandoned" (Fernandez 1982:229,507).

The Yoruba god of iron, Ogun, is the protector of blacksmiths and smelters. The rituals to Ogun include the technology of iron smelting. Ogun (or Gu to the Dahomey, who are part of the same culture family,) is a fearsome guardian of metal technology, implements of peace and of war. Sandra T. Barnes defines Ogun as the positive and negative equation of creation and revolution ...

a metaphoric representation of the realization that people create the means to destroy themselves ... Ogun also represents human triumphs over limitations. (1989,17)

When he is angered, Ogun goes into the forest, and technology stops. The slave trade produced such a response.

Figure 4. Maryland iron furnaces juxtaposed on earlier American Indian settlements and mining sites



Michael Stewart, The Middle Archaic period in the Great Valley of Maryland. Maryland Archaeology 25, March 1989.

CHAPTER TWO

AFRICAN IRONMAKING IN WESTERN MARYLAND IN THE ERA OF THE AMERICAN REVOLUTION, 1760 - 1800.

The Managers of that Trade themselves, and others, testify, that many of these African nations inhabit fertile countries, are industrious farmers, enjoy plenty, & lived quietly, averse to war, before the Europeans debauched them....

Thomas Paine

"Essay on Slavery", March 8, 1775

The woodlands of western Maryland, in the Blue Ridge and Great Valley, were a deciduous forest of oak, hickory and chestnut which renewed themselves and adapted to climate change through millenia before any human habitation. For five thousand years, until the arrival of the North Atlantic peoples (Deloria 1991) in the 17th century, American Indians dug quarries and built workshops in the forest to make tools from the hard mineral rhyolite and quartzite deposits. In modern Indian times the area was on a major north-south trail (DuBose 1985; Stewart 1989). Western Maryland in the 1760s, in the closing years of the French and Indian wars, was at the edge of the conflict in which the long-existing civilization had been removed or destroyed to make room for European advancement (Thornton 1987). The Africans left one war zone and entered another.

The second group of settlers, following Indian removal, were German immigrants and freed indentured servants. The Anglo-American large landholders were often absentee. Soldiers from both sides tired of the Revolutionary War in the 1780s farmed small parcels in the hills which sometimes were not legally purchased (Grant Conway Collection). entrepreneurs began successfully building iron furnaces on these lands, they needed vast woods for charcoal, water power, and access to ore deposits. The politically influential ironmasters forced many whites west through purchase and condemnation (Graham 1981; Jones 1981, 146-147).

Early iron furnaces used primarily slave labor. This occurred in northern furnaces as well as in southern states until slavery was abolished in northern states during and after the American Revolution. This labor practice, along with charcoal ironmaking technology, continued in the slave-holding states until the 1840s (Wesley 1978; Lewis 1979).

The manufacture of charcoal for fuel for iron furnaces was a process well-known to Africans, although it was carried out on a much smaller scale. In Maryland an acre of hardwood -- a quarter of a century in growth -- was consumed as charcoal in a single day at a single furnace (Theriault 1989,49). Making charcoal required skill; cutting the wood and transporting it to the furnace was a common slave occupation. The voracious need for fuel supplied work for many free persons as well.

The extent of the skills used by slave laborers is an important issue for consideration of the origin of those skills. At furnaces, the iron ore was reduced by heat to a mass that could be taken to a forge, where the iron was reheated and impurities removed. This was the process in Kamalia described by Mungo Park. The major difference in the European method was the original reduction of the ore in the furnace, which used a cold blast of air created with large bellows operated by water wheels. Because Africans preheated the air, they could use a much smaller furnace with handoperated bellows. At some unknown time, ironmasters in Maryland began experimenting with preheated air, which was far more efficient, according to local iron expert Joel Anderson (interview 1991).

The process most directly like the African experience was work at the forge. Here the rough, impure iron, called pig iron, was reheated or remelted and made into wrought iron, which could be sold in bars (or anchonies) for casting into implements. The reconstructed Hopewell Furnace in Pennsylvania demonstrates this process (U.S. Dept. of the Interior 1983).

Metallurgical archaeologist Helen Schenck examined the slag (waste material) at the Catoctin Furnace excavation. Some of it came from a blast furnace, and some clearly from the forging process (Schenck 1981,43).

In an interview, Dr. Schenck found the idea of a transfer of African technology by the workers at their daily tasks worth further consideration. She wrote in a personal communication the reasons African workers would be likely to excel at forge work:

I suspect your hypothesis of a deliberate searching out of skilled African ironworkers could still be quite accurate, and that their knowledge could well have played a part in the technology of iron production at Catoctin. Certainly knowledge of the appearance and behavior of iron at a range of temperatures and with a range of carbon contents is one that they would have commanded which would have been desirable and useful to their owners. I think I would look for their knowledge to have transferred most readily in forges -- whether finery or bloomery; possibly also blacksmith shops.

(January 19, 1991)

Forges as a medium for African technological transfer was seen by Schenck due to a study by Gary Wheeler Stone at which the slave workers were concentrated at the forge. At the Mount Joy Forge in Valley Creek¹ three slaves -- Ish, Pomp, and Prince -- and an identured Irish servant, Henry Saleighman, performed two-thirds of the annual work in 1757 (Stone 1984).

The forge concentration of slave workers was noted again, independently, by archivist Linda McCurdy at Duke University, whose Ph.D. dissertation was on the early

¹ This is the location of two forges owned by the Potts family, which would become the encampment of the Continental Army during the American Revolution known as Valley Forge.

Pennsylvania iron industry (1975). Pennsylvania ironmasters were the largest northern slaveowners during the colonial period (Berlin 1982).

Looking at available data with this new awareness brings a Maryland example. The Northampton Furnace in 1783 had 102 slaves, twenty-nine of whom were at the furnace, and seventy-three at Ridgely Forge (Jones 1981).

A forge advertised for sale in 1767 specified the "slaves used to work there as finers, hammersmen, and colliers, and well acquainted with the business, and two valuable blacksmiths" (Virginia Gazette May 14, 1767). During the Revolutionary War the Principio Furnace was confiscated by the Maryland General Assembly. The ironmaster, Thomas Russell, was exempted with a share of "enough buildings, machinery, utensils, Negroes and livestock be set apart to enable him to carry on the business" (May 1945,70).

Did colonial American ironmasters select Africans for their ironmaking skills at purchase? African slave recruitment for blacksmithing or smelting skills is not individual in the slave trade records. Preference was common for slaves from one area over another. The selection basis, states Michael Craton, was based on the:

...regional variations in traditional African occupations and skills [which] played almost as significant a role ... as did the age, health, and stereotypical characteristics of slaves purchased. (1988,15)

Craton cites woodworking and blacksmithing skills as regional slave selection criteria.

It is evident from newspaper advertisements that as soon as Africans and African Americans were placed at the forges and furnaces they became associated with ironworking skills and sold within the colonies with their expertise known.

An African blacksmith, "Imported in 1760, so that he scarcely speaks any English, but can work at the Smith's Trade, having been employed in his own Country in that way," liberated himself from slavery in 1761 (Windley 1983,2:42).

The immediate occupational identity that accrued was a direct African cultural tie that slaveholders unwittingly perpetuated. Pride in workmanship and honest appreciation of the skills and monetary value of the artisans by the ironmasters reinforced the elite group traditions. Ronald Lewis writes that "many slaves at Oxford Iron Works in Virginia had multiple skills" (1977:144).

Another practice which reinforced African cultural identity from the beginning was the inclusion of women in the labor force. Most women performed sex-specific duties in food and textile production, but there is substantial evidence of women assigned furnace and forge work in the Chesapeake area (Lewis 1977; Kulikoff 1986). Charles Dew found that at the Oxford Iron Works in Virginia, women who did actual furnace work were wives or daughters of furnace men (1974:199).

Regular occupations among men and women reinforced the traditional African ironmaking cultural similarity that served to strengthen the *nommo*, the collective identity, and thereby the self-congruity, of the enslaved ironworkers. Eugene D. Geneovese calls it "an organic combination of practical needs from the aesthetic they had brought to America from Africa" (1972,395).

The technological transfer of African methodology into the new environment of the slaves at work did not occur at a conscious level of assistance to the slaveholders. Captive people do not willingly contribute to their oppressors (Deloria 1970). Africans who were captured, survived the arduous journey and a more arduous physical and psychological "seasoning" in the West Indies, were not likely to volunteer information or skills.

This natural response to slavery is demonstrated by the experience of the Scot in Africa who described West African iron furnaces, Mungo Park. At one point in his journey he was captured by Moors and held in bondage for several months. When asked to shave a young boy, the surgeon feigned ignorance and reacted clumsily, believing that if he became too useful he would never be released (Park 1800,191).

¹Self-congruity is a behavioral science term which describes the 'psychophysiological ... processes which act to resolve cognitive dissonance, the ego defense mechanisms, and all other functions designed to protect and preserve self-consistency' (Sirgy 1986 in Germana 1989,233).

The early blacksmiths in Maryland labored in the tobacco fields and kept their sacred science to themselves.

Ann M. Pescatello describes this cultural process among Africans in spiritual terms:

The African perception of man and his relationship to the world and his fellow-man is distinctly different from the Western

A constant struggle against malevolence was a major mechanism for moral control in the African environment. For the black man this translated into a spiritual struggle against the white world to be undertaken at any opportunity. The same perception functioned in Africa among different ethnic groups. (1977,28)

As artisans among slaves became an elite group, using collective bargaining and other strategies to improve their position and get wages for overwork that were often applied to self-purchase or funded escape, ironmaking knowledge had value to the slave (Rawick 1972,28). Robert S. Starobin states extra cash incentives were received by half of the industrial slaves in America (1970,259). Further, the craftsman slaves enjoyed elite status among other slaves that was not shared by house servants, whose privileges depended upon the whims and desires of the slaveholders (Genovese 1972,393).

European smelting technology with water wheels and cold-blasts of air to power bellows was quite different from the Africans' preheated air and smaller scale production with hand-operated bellows (Bjorkenstam 1985). Quantity of production was increased in England in the latter years of the 18th century by using coke as a fuel substitute for charcoal.

Neither this new technology, nor an increase in production, was immediately transferred into the new United States (Temin 1964:15).

The furnaces in the North, which had more white laborers with familiarity with English technology, used the new methods sooner than the southern industries whose labor forces were primarily black. A synthesis of technologies of Europeans and Africans occurred where African ironworkers performed many high-level duties, based upon day-to-day operations. Even today, oral tradition in western Maryland says that only blacks knew how to tap the hearth to release the iron for casting (John Frye interview, 1985).

Figure 5. American pig iron furnace

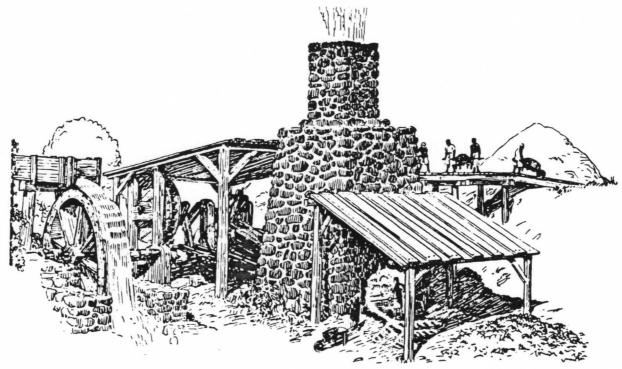


illustration by Edwin Tunis, Colonial Living. New York: World Publishing, 1957.

THE HUGHES FAMILY FURNACES AND FORGES

Daniel and Samuel Hughes were western Maryland ironmasters whose furnaces and forges were located on Beaver Creek, which joins the Antietam Creek midway in its flow toward the Potomac River. They built and expanded iron facilities in Washington County after they inherited the Antietam Furnace from their father, Barnabus Hughes, in 1766. The Hughes' Antietam Furnace closed during the American Revolution and the larger Mt. Aetna furnace was built nearby.

The Hughes' support of the American Revolution, and profits from the arms and tools they supplied the army, established their family in the industry with more long-term success than others in western Maryland (Frye 1984; Dorsett 1984). In 1811 they built the Mont Alto Furnace in Pennsylvania, which still operates. Census records show small numbers of slaves and a growing free population, whites and people of color, listed with the Hughes' in western Maryland. Michael D. Thompson cites twenty-nine slaves there in 1783 (1976:52).

Table 1. Eight Negroes in the inventory of Barnabus Hughes,
Antietam Furnace, 1766.

	Name	Age	Value in £	
	Fortune	30	58	
men	Prusia	30	60	
	Gimmer	25	38	
	Day	28	60	
	Cuffy	30	50	
	Nero	18	58	
	Sambo	60	15	
woman	Peiss [Priss?]	24	45	

Source: Susan Winter Frye, <u>Archaeological Excavations at the Antietam Iron</u>
<u>Furnace Complex (18WA288) Washington County, Maryland. 1984.</u>

FIELDEREA FURNACE

Fielder Gaunt (sometimes Gantt) owned the Fielderea
Furnace on the Harpers Ferry Road near Middletown in
Frederick County, Maryland. He purchased sixty slaves in
Annapolis to begin making iron in 1763. Gaunt, in his
words, became an "adventurer" by selling this group intended
to be an ironmaking community for immediate profit and a
promise from a "Virginia gentleman," James Hunter, to
replace the work force from his plantation. Gaunt purchased
the original group with money from Benedict Calvert, a
partner in Maryland furnaces with Thomas Johnson (Chancery
Record B132). The loss of trust from these key capitalists,
among the political and social elite of the colony and new
state, made Gaunt an ousider in the growing interlocking
relationships of the furnace owners.

Table 2.1 Twenty-five slaves mortgaged by Fielder Gaunt, Frederick County, to Caleb Dorsey Jr., Ann Arundel County, 1766.

Negro M	len	Negro Women	Negro Men	Negro Lads
Scipio	Sandy	Clarimento	Romulus	Jack
Syphax	Ben	Kate	Cupid	Great Jacob
Cesar	Michael	Clarissa	Cockries	Little Jacob
Rufus	Austino		Toby	
Pompey	Charles	Negro Boy	Bob	Negro Woman
Fuller	Anthony	Lincoln		Priss

(Land Record K:457-458, Frederick County)

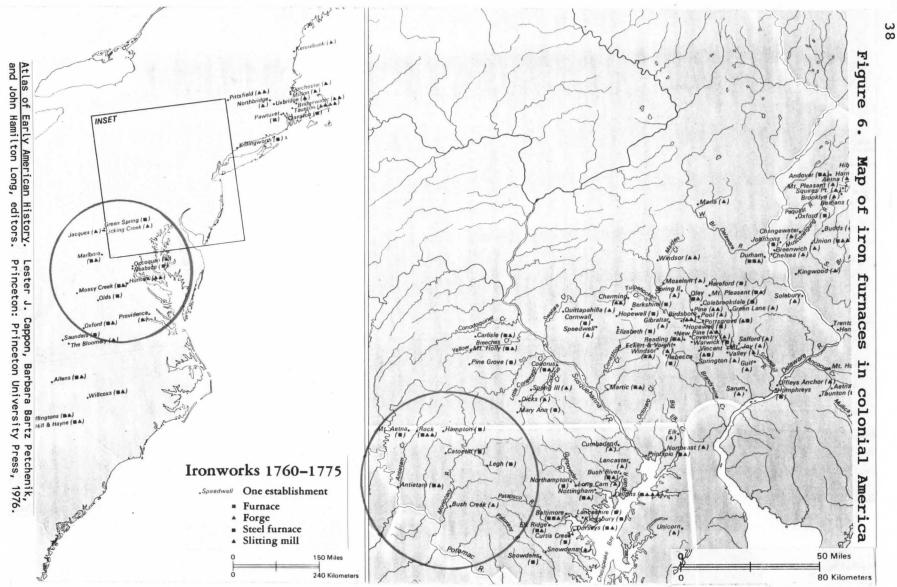
Table 2.2 Nineteen slaves at Fielderea Furnace sold to Thomas Smith and John Cox of Philadelphia, 1766.

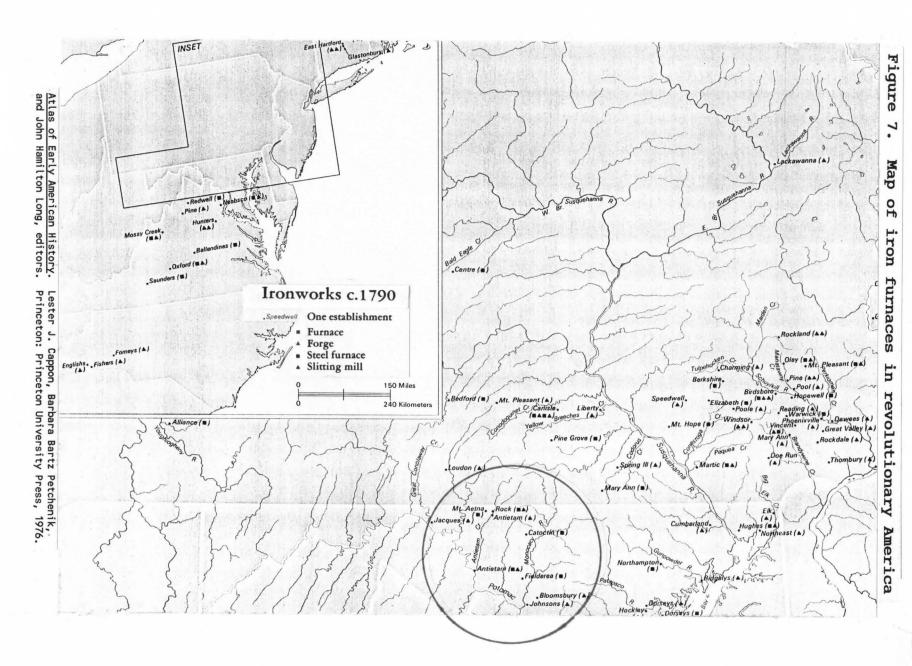
Sambo	Polidoro	Austino	Flora	
Dublin	Cato	Valentino	Silvia	
Romio	Tom	London	Cumber	
Leith	Miro	Juba	Pompey	
Castalio	Yorrick	Juno		

(Land Record K:502, Frederick County)

Source: Ann Labharz of the Frederick County Historical Society Maryland







DEVELOPMENT OF THE CATOCTIN FURNACE SLAVE POPULATION

In far western Maryland in the 1760s, the Green Spring Furnace and Licking Creek Forge were frontier communities. At nearby Fort Frederick, hundreds of settlers were huddled for protection at the end of the French and Indian Wars (Stoltz 1985). The principal Green Spring owners were Launcelot Jacques and Thomas Johnson, whose brother James Johnson built the forge to work the iron from the furnace. The Johnsons, with two more brothers, would build the Catoctin Furnace in 1774. Thomas Johnson became the first revolutionary governor of Maryland in 1777.

The Green Spring partnership was amicably dissolved in 1770, but James Johnson still operated Licking Creek Forge until 1774 (Johnson [1842]1972). It is unclear if in any of these transactions ironworking slaves moved with the Johnsons, or were sold with the facilities.

The Jacques' operations had a slave population of about eighty -- almost entirely men --in 1783. It was the largest ironworking slave group in western Maryland at the time (Thompson 1976,71). But by the first national census in 1790 the number of slaves was low. As Figures 6 and 7 show, only one of the three furnaces and forges was still working.

A likely source for the slaves of Catoctin Furnace, mentioned by local historians and old residents, was the quickly-failed Hampton Furnace near Emmitsburg, in which the Hughes family, Thomas Johnson and Launcelot Jacques also had

financial investment (Thompson 1976,61). Advertisements for the new Hampton Furnace in 1767 included "Negroes and Servants," but a notice in 1773 is only for buildings with a suggestion it would make a good merchant mill. Specific sources for the Hampton population, gathered and dispersed in a short time, are unrecorded. The principals lived elsewhere in Maryland, except for the ironmaster Normand Bruce (Crapster 1985). He retained, or added, twenty-four slave workers who were listed in the census of 1790.

The gathering of slaves for Catoctin Furnace took a number of years. Some were purchased jointly by four Johnson brothers¹, who also built two forges and two other furnaces in Frederick County, all within relative proximity to the fast-growing city of Frederick. Advertisments for three men who liberated themselves from Catoctin Furnace in 1780 and 1782 reveal disparate origins. One was recently purchased from Anne Arundel County, another hired from a planter in Georgia. Phil, origin unknown, carried a reward of \$100, or double that amount if found out of the state (Windley 1983, 2:235,272).

A fifth brother, Joshua Johnson, was a correspondent with Annapolis merchants in 1780 to purchase for Thomas Johnson some *osnabrigs* (a substandard material used for

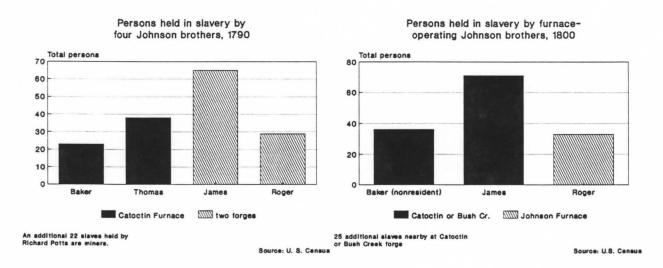
On 27th November 1788 one Negro man slave named Jack aged about thirty five years, one Negro lad slave named James about eighteen years of ages, one Negro woman named Milly about thirty seven years old and her child named Phil about thirteen years old were sold by John Rawlings, iron master to Thomas, James, Baker and Roger Johnson.
Land Record WR-8:286, Frederick County.

clothes for slave workers) and other sundries. The Annapolis firm of Dick, James, and Stewart owned a store. They also sold iron for their clients and were creditors. In manuscript copies of their outgoing correspondence at Duke University, references appear to most of the ironmasters in western Maryland (Dick, James and Stewart 1773-1781). The Annapolis firm also owned slave trading vessels which ran to Barbados.

Governor Johnson appointed his brothers colonels into the Maryland militia during the Revolutionary War. Catoctin Furnace workers made tons of shells for the American armies. Sometime after the war the management of Catoctin Furnace shifted from James Johnson to Baker Johnson. The forge directly adjacent to Catoctin Furnace, purchased from the Brice family, produced bar iron (anchonies). Baker Johnson managed the Catoctin facilities while James Johnson, the family builder, established a forge and mill at Bush Creek, below Frederick. Thomas Johnson moved to Frederick and sold his portion of Catoctin Furnace (but no slaves) to Baker in 1805 (Land Record WR-22:534). Roger Johnson, the youngest, managed their furnace at the mouth of the Monocacy River and the Bloomsbury Forge.

The Catoctin Furnace slaves are said to have cast the boiler for the first successful steam engine invented by James Rumsey in nearby Shepherdstown in 1787 (Maryland Dept. of Natural Resources 1978).

Figure 8. Forge and furnace workers held by the Johnson brothers, 1790 and 1800



THE BURIALS AT CATOCTIN FURNACE

State highway construction above Catoctin Furnace in 1977 revealed a cemetery which, by oral tradition, was for the slaves. Examination of thirty-one removed burials (about one-third of the burials, the rest are undisturbed) revealed a unique population. The people were genetically intact and of West African origin (Kelley and Angel 1983).

Dating this skeletal population is based upon the nails used in the coffins. The range is from the 1790s to the 1830s. The hand-forged nails are of excellent steel internal structure, not reheated in construction (Epstein 1981).

Studies of the people revealed general health of adults (there were several sickly infants and children) whose longevity was greater than average slaves, and males (41.2 years) greater than females (34.6 years) (Kelley and Angel 1983; 1987). The adults, eight men and eight women, were

evenly distributed by age. Based upon demographic calculation (Johannson and Horowitz 1986)¹, the birth rate of this groups was 4% in 1800, the mean date of the burials. This matches the physical evidence found by Lawrence Angel and Jennifer Kelley at the Smithsonian Institution of one or two births per woman. This birth rate is low.

The presence of a larger amount of lead in the bones of the women in comparison with the men removed from the cemetery led to a pertinent study (Aufderheide et al. 1985). This was certainly occupational — the bones of the women also revealed hard and repetitive labor. Were they casting pots? Perhaps they were making pottery with lead glazes. This was a practice among slave women in the West Indies which may have been strong enough to induce poisoning — certainly enough to deposit amounts of lead that do not disappear from bones (Armstrong 1990).

The coffins contained signs of the traditional West African custom of placing food with the deceased. Some coffins contained chips of rhyolite fashioned by American Indians; one contained a rhyolite scraping tool. Further research should examine African meaning, although it is likely the rhyolite is simply archaeologically intrusive (Orr, Stewart, Thomas, Weil interviews 1991).

¹The formula devised by historian Sheila Johansson and physical anthropologist Sheila Horowitz for closed skeletal populations is that the birth rate may be estimated as the reciprocal of the mean age of death, which is 25.87 years for the thirty-one Catoctin Furnace burials.

The most pressing unanswered question is the origin of the buried workers. Ira Berlin, in "Time, Space, and the Evolution of the Afro-American Community" states that, in the Chesapeake, the first slave immigrants were "West Indian creoles who had English or Spanish surnames and carried records of baptism" (1982,62). The largest direct African importation into Maryland occurred in the 1740 - 1760 period. There was a strong bond between indentured white servants and black slaves that included intermarriage and mutual aid. A significant multiracial group obtained early freedom (Berlin 1982,63).

One Maryland family from an ironworks location traces an ancestor from Guinea brought to Elkridge Landing (now the Baltimore Airport) in 1767 (Snowden 1980,9). Another corroborates in oral family history the origination written by Ira Berlin -- their ancestors came to Maryland well before the American Revolution, and were Catholic (Joe Beaner interview, 1991)

Some in the early Iron Hill, Delaware, furnace population were Zarwed, from the Congo (Weil interview, 1991). Iron Hill is at the Delaware border with Maryland. There was a marked additional African immigration to the

¹ Members of the men's choir at the Iron Hill Church of God use a traditional African ring step. As well, they sing of the proper measurements for a city as foursquare, the same measurements noted by James Deetz in African American self-built structures as a cultural spacial pattern of African origin (Deetz 1977)).

Delaware Valley in the 1760s, resulting in a "reinvigorating of the African culture" (Smith and Wojtowicz 1989:8).

The gradual manner that the Johnson brothers used to establish a slave work force contradicts the genetically intact physical attributes of the burials. However, the diary of a white Moravian minister who preached to the slave community there in 1799 shows a possible common origin of the group, and an African and/or West Indies identification. It also reveals the working conditions when the furnace was at an active stage, or in blast -- seven-day work weeks.

James Johnson, his brother and sons and particularly with the poor Negroes whose inward and outward conditions are troubled ... A little group of them gathered around me at the top of the furnace opening. I depicted the Saviour as He redeemed them from sins upon the cross through his suffering and death ... how so many of their countrymen in the West Indies, through belief in the Saviour, have achieved bliss through His death. They wept very much because they were bound to work so hard during the week as well as on Sunday in the iron smelter and thus were seldom able to hear the Word of God. My conversation came to an end, the signal was given for the pouring and each of them had to go back to work. (Anderson 1985, 6)

We must consider that a new slave population entered the furnace at this time (the 1790s), perhaps with the immigration of refugee whites from Haiti. There was a marked increase in the West African slave trade to North America during this decade, especially to Haiti. Importation was increased to offset the negative growth rate among slaves in Haiti due to starvation and other physical abuse (Foner 1975).

The population of the slave group at the forge and furnace at the mouth of the Antietam Creek came primarily from Virginia. The first slaveholder for this group was John Semple, representing (perhaps even defrauding) business investors in his native Scotland. "The key to the slaves at Antietam Ironworks is John Semple and the Occuquan Furnace," Michael D. Thompson stated in a 1985 interview.

Semple had purchased two forges on the Occuquan Creek in Prince William County, Virginia, and the slaves who operated them from the Ewell family, who owned the furnace next to the forges since 1749. John Semple and the Ewells had such a falling out that they refused to do business with each other on the same property; he established Keep Triste Furnace far up the Potomac by Harpers Ferry to supply the iron for Occoquan Forge (note Boatswain Roger in Table 4.1) (Skaggs 1984; Theriault 1989).

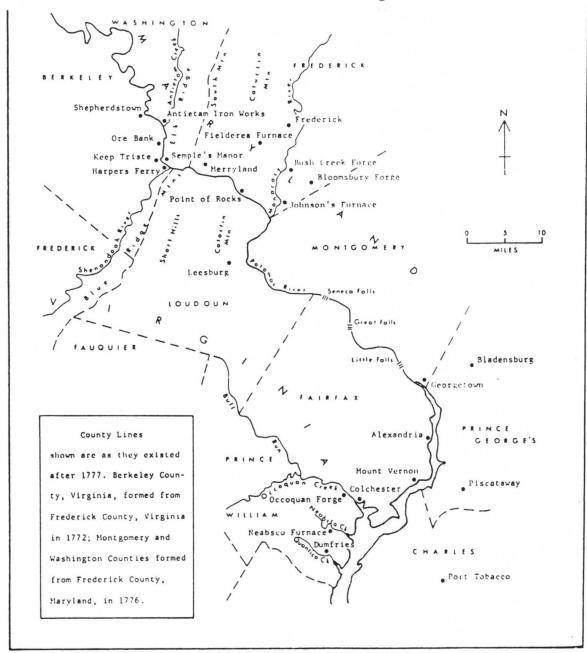
Historian David Skaggs places Semple with George Washington and Thomas Johnson in visionary ideas of development of the Potomac as a water shipment route west. But Semple violated basic rules of good business, became untrustworthy to his partners who were married to his sisters, and eventually to all who came in contact with him (Skaggs 1984; Dick, James and Stewart 1773-1781). Mortgage and land records provide names of the forge workers (see Tables 3.1 and 3.2 on page 50).

Semple began constructing a forge above the Potomac shoals in the early 1760s. He went into partnership with three Marylanders and a Virginian in 1765 (Samuel Beall, Richard Henderson, Joseph Chapline and David Ross) who would actually finish construction and run the forge with pig iron from Semple's Keep Triste Furnace until they could build a furnace stack (Land Record J:793, Frederick County). The Antietam Ironworks partners established their furnace to supply their forge about 1767, when they too had an argument with Semple (subject to arbitration by neutral parties, one of them George Washington). No slaves were transferred in the terms of this agreement.

It appears that Semple kept the Occuquan Forge running until at least 1769, as well as Keep Triste Furnace. Both slave groups were mortgaged to James Lawson, Semple's partner who came from Scotland in 1769 to work out the tangled business affairs.

John Semple died in debtors prison in 1773. Lawson returned to Scotland in 1774, prohibited by Semple's will from selling Keep Triste for six years (Theriault 1989,51). The possible transfer of the mortgaged slaves from Occuquan and Keep Triste to the Antietam Ironworks partners is part of an unclear period of the settling of Semple's affairs, greatly complicated by the American Revolution as well as his business difficulties.

Figure 9. The Potomac world of John Semple



David Curtis Skaggs, John Semple and the Development of the Potomac Valley 1750-1773. The Virginia Magazine of History and Biography 92, July 1984.

The people in the Semple lists (Tables 3.1 - 4.3) have a number of names that refer to African origin, such as Eboe Ben, Golingo Harry, and Essie, a Ghanian day-name that remains common in African American society (Madubuike 1976). The named people in the mortgage are specifically associated with forge work. Titles for these tables are directly from the documents (i.e., "Negroes, Mulatto").

Table 3.1 Twenty-six Negro men slaves employed at Occuquan Forge

Abner	John	King George
Harry	Chaise Jamerton	Kitt Aaron
George	Tom	George
Elisha	Pud	Denney
Joe	Carl (or Phil)	Yamian Bob
Forge Harry	Tobacco Tom	Willoughboy
Pompey	Gilbert	Nace
Toney	Sam	Tominey
Abram	Eboe Ben	

Table 3.2 Ten Negro women slaves employed at Occuquan Forge

Kate	Pegg	
Jean	Sucke	
Sall	Cloe	
Agnes	Tennor	
Mary	Nell	

Table 4.1 Thirteen* Negro men employed at Keep Tryst Furnace

Peter	Boatswain Roger
Golingo Harry	Golingo Willie
[illeg]	Sampson
Peter	Tom
Dick	Will
Eboe Harry	Harry

^{*}discrepancy in count either original error or illegibility

Table 4.2 Two Negro boys and one Mulatto man employed at Keep Tryst Furnace

Boys:	Tom and Gayley	Man: Sam	

Table 4.3 Four Negro women and one Negro girl employed at Keep Tryst Furnace

Sarah	
Mary Ann	Girl: Essie
Beck	
Jean	

Indenture between John Semple and James Lawson mortgaging land and slaves.

Source: (Land Record M, Frederick County, Maryland, April 1, 1769)

Found by: William D. Theriault, Friend's Orebank and Keep Triste Furnace. West Virginia History XLVIII:43-60. 1989.

During the American Revolution, the Antietam Ironworks mined the orebank and whites settled on Semple's mortgaged property, considering it "land which belonged to nobody" (Graham 1981). Keep Triste Furnace may have operated part of the time, but the executors were British in an area of strong revolutionary support (Theirault 1989).

Slaves often were able to take advantage of the times. When Pennsylvania abolished slavery in 1780, many fled north to obtain jobs, calling themselves free with little concern from an industry that needed all the skilled workers it could muster, especially as many white workers were in the state militias and the Continental army (Walker 1969). The Maryland militia was the only southern state to include slaves to fill its quota of fighting men; those who joined (with permission of the owner) expected eventual freedom (Foner 1975,329). Some of the workers from the Semple estate could be among their number.

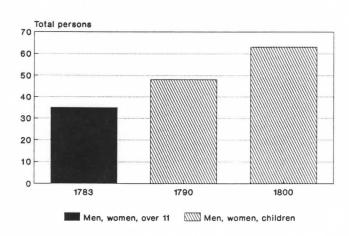
It was a very unstable time for slavery in the war theatre. A study by James Walker of blacks who joined the British army, because of promise of freedom, reveals a predominance of artisans in relation to their smaller number in the slave population: a third of one sample, and four fifths of another were men of specific trades (1975,5).

Personal hazard was a key issue. Thomas Jefferson recorded the fate of thirty-two slaves who joined the British or fled to them as they came through Monticello and his other

plantations. Thirteen died of unspecified causes; five died of small pox "from the enemy," ten returned and lived, and four men who joined the British apparently were successful (Betts 1953,29).

Changes due to deaths among the original partners of the Antietam Ironworks created instability until 1782, when Richard Henderson, as the sole survivor, purchased half the shares held by the families of the deceased three. The tax assessment records of 1783 show thirty-five slaves, male and female, above the age of eleven (Thompson 1976,34). Henderson's Antietam Ironworks manager John Ritchie understood the value of skilled slave workers. He wrote to Bataille Muse of Virginia in 1786 seeking to purchase a blacksmith "capable of shoeing a horse, steeling an ax, and laying plow irons" (Mullin 1972,87).

Figure 10. Slaves at Antietam Ironworks during Henderson ownership, 1782 - 1806



Sources: Thompson (1976); U.S. Census

Keep Triste was purchased by the Pennsylvania Potts ironmaking family in 1789 -- the same who profited from the labor of Ish, Pomp, Prince, and Saleighman. The landowners by this time were mortgageholders, Henry and Ludwell Lee. Henry Lee was a future governor of Virginia (1792) and the father of Robert E. Lee (Theriault 1989,51). Slaves are not included in the Keep Triste Furnace inventory of 1793 (John Potts/KeepTryst Furnace Papers).

Figure 11. Antietam Ironworks lands



THE END OF THE REVOLUTIONARY ERA

It is a singular aspect of the western Maryland furnaces that they were economically more like those in Pennsylvania with their national orientation than those in the Chesapeake. They were built to supply the westward-moving local population, not the colonial power (Paskoff 1983,60). They manufactured iron goods in violation of British laws prohibiting it. The furnace owners were leaders of the American Revolution; their slave workers manufactured the cannon and ammunition.

Historian Benjamin Quarles (1983) has analyzed the philosophical mind of slaves and free blacks in "The American Revolution as a Black Declaration of Independence." The underlying motivation for those who joined either European side was freedom. Quarles traces the founding of independent black churches, "which preached the equality of all human beings before God and had its own interpretation of the Christian theme of the apocalypse," directly to the American Revolution (1983,294). The churches were a source of leadership and democratic practice in the emerging African American community.

At the same time, the American Revolution was a victory for American capitalism, in which southern slaveholders played a leading role and thus had the opportunity to develop its philosophy. Quoting Benedict Anderson, historian James Oakes argues that the new nationalism was racist in excluding

slaves, placing them "outside the 'imagined community' of the modern American nation." By eliminating their "nation-ness," slaves were reduced to "biological physiogmony." Oakes reminds us that "the American Revolution was a major turning point in the development of scientific racism" (1990,74).

African historian Bernard Magubane puts it directly in The Ties That Bind: African American Consciousness of Africa:

To the Afro-American, the system of white domination is not only insidious, it was built on his total negation. The black, permanently an alien in his own country, lives in a state of permanent depersonalization. (1989,232).

The clash between these two ideologies -- attempts at inclusion by black ministers in the leadership of African Americans, and their exclusion by whites who justified the paradox of racial slavery in their new world defined by the Declaration of Independence because blacks were not part of the nation -- can be seen in microcosm in the history of the African American ironworkers in western Maryland as the nineteenth century unfolded.

Figure 12. Isaac Jefferson, blacksmith



Isaac Jefferson, blacksmith (born 1775) in the 1840s. He dictacted his memoirs to Charles Campbell at this time concerning his life at Monticello as a slave of Thomas Jefferson. Ironmaking at Monticello included a nail factory and charcoal works; Thomas Jefferson also purchased bar iron for use by blacksmiths such as Isaac. Although it appears in his memoirs that Isaac Jefferson was a "contented slave," a new edition edited by Rayford Logan (1951) reveals that Isaac in 1812 was "taken up by Samuel Grosse jailor of Bath county" and the slaveholder paid \$30 for his return.

Reprinted from Ronald L. Lewis, <u>Coal, Iron, and Slaves;</u> <u>Industrial Slavery in Maryland and Virginia, 1715-1865</u>, Westport: Greenwood Press, 1979. frontispiece.

CHAPTER THREE

CHANGES AND RESISTANCE: AFRICAN AMERICAN IRONMAKING COMMUNITIES IN WESTERN MARYLAND, 1810 - 1850

I had him severely flogged in the presence of his old companions, and committed to jail, where he awaits your arrival. The course he has been in, and all circumstances convince me he will never again serve any man as a slave...

it will therefore be unquestionably best for you to sell him.

Thomas Jefferson

(concerning Jame Hubbard,

a previous slave manager of the Monticello charcoal kilns, April 16 1812) (Betts 1953,35)

The master needs the slave far more than the slave needs the master.

Angela Davis (1971,10)

The change signified by the turn of the century was marked by a successful revolution by slaves in Haiti. Toussaint L'Overture carried the standard of Ogun, the angered god of iron, as his personal *loa* -- a spiritual guide -- in his decade of fighting (Laguerre 1989).

The Haitian Revolution (1791-1804) was the ideological conclusion to that of the Anglo Americans in 1776 and the French in 1789. The slaves' revolution was a unifying topic carried by boatman and wagoners, and even among popular musicians in travelling bands on "the common wind of Afro-American communication" to other slaves in the hemispheric

diaspora (Scott 1986). Julius Scott argues that "the rapid spread of news was absolutely central in shaping the political climate in New World slave societies at the end of the 18th century" (1986).

Many white refugees from Haiti came to Maryland during the war years, attracted by the presence of other Catholics (Hartride 1943). Although most people fleeing Haiti settled in New Orleans and Charleston, a substantial group came to Baltimore and to Frederick. These refugees brought slaves with them, a group that was so decidedly activist that in 1797 the Maryland legislature, which had previously enacted relief funds for resettlement of the French, declared the slaves "disorderly and dangerous; those seized on suspicion by Baltimore authorities, if not removed from Maryland by their owners ... be sold to the West Indies" (Jordan 1968,382). Thomas Jefferson, writing to James Madison in 1799, felt that travelling Haitian slaves would be "missionairies to the southern states" of the "combustion" of resistance to tyranny demonstrated by blacks in Haiti (Jordan 1968,381).

In 1800 Gabriel Prosser, a blacksmith in Virginia, and other artisan slaves organized a group of 1,000 men and women to capture Richmond and demand freedom. Prosser's wife Nanny

[&]quot;The common wind" is a line from William Wordsworth's 1802 sonnet to Toussaint shortly before his death: "Powers that will work for thee: air, earth, and skies/ There's not a breathing of the common wind/ That will forget thee; thou hast great allies/ Thy friends are exultations, agonies/ And love, and man's unconquerable mind" (Hunt 1988,95).

was a leader in the proposed revolution. Severe rain and flooding stopped their progress. The plan was betrayed and at least thirty in the conspiracy were executed (Aptheker [1943]1968; Mullin 1972). It was reported that slaves at the Oxford Iron Works were cognizant of the plan (Mullin 1972,143). They did not betray it.

Slave revolution historian Eugene Genovese argues that the participants were inspired by the Haitian Revolution (1979,114). Certainly the assembling of such an army indicates a radical change from individual or small group attempts at freedom by running away.

Events in Haiti were of such local interest in Maryland that the front page of the Frederick-Town Herald of June 16, 1804 carried the "Liberty or Death" proclamation of Jean Jacques Dessalines in its entirety.

The inhabitants of the town of Frederick and surrounding countryside had increased so much in the last ten years of the 18th century that the westward-moving center of population of the entire nation was just a short distance away in 1800 (U.S. Bureau of the Census 1990). The state's population growth kept the same pace among blacks and whites - whites 90,000 in the majority -- until 1820 and 1830, when European immigration increased the margin from two to two and one half whites for every black person in Maryland (U.S. Bureau of the Census 1975). The number of slaves in Frederick and Washington counties was low in proportion to the rest of

the state; the farther west the fewer slaves. A change that dramatically affected the ironworker population was the proportion of free black and triracial people to slaves in western Maryland. By 1830 this ratio was 1:2 (Census for Frederick and Washington Counties, Maryland, 1830).

The free population of persons of color in the census records are often called free blacks. This is not accurate. In the census manuscripts they are "all other persons except Indians, not taxed." Dean Colimer, a Pennsylvania ironworker descended from this population who was in the Western Maryland Room at the Washington County Free Library looking for relatives in the records of the Colored Cemetery at Red Hill, described the triracial people and their history:

We were called Mulattos. We were mixed races -whites, blacks, and Indians. There were slaveholders who
would sell their own children. The Mulattos had to leave
Virginia about 1806. They were forced out. We came in
groups to work at the iron furnaces, moving on together
to other furnaces in bad times. Some stayed permanently
in the Catoctin and Antietam villages. (interview, 1991)

These free workers had a separate identity from the slave ironworkers at the furnaces, and there is no evidence of hostility between them. It will be shown that the two groups intermarried.

¹The term Mulatto carries a derogatory meaning in the present day. It is used in this paper as it appears in the legal records or, as in this case, used by a member of the group.

²The Virginia legislature passed a law prohibiting manumitted people from remaining in the state after this date.

According to Ira Berlin (1982), many of the colonial era free black population in Maryland were descended from white mothers who were indentured servants, and black men, free or slave. This increase of this group became such a threat in the eyes of the Anglo Americans in Maryland that laws were enacted that removed the children of white women and black men and sold them as slaves (Foner 1975).

Most free persons who were previously slaves, no matter how closely related to the master, needed to purchase their way to manumission through a period of years at work. The only legal way to shorten this period was to pay the owner. The following primary accounts of two ministers, both former blacksmiths, show the pain of this price. The rate of exchange to purchase yourself or the members of your family was all the traffic would bear.

THOMAS W. HENRY, BLACKSMITH - MINISTER

The African Methodist Episcopal minister Thomas W. Henry was burying people in the Red Hill Colored Cemetery, from the 1830s through the 1850s. The life and times of Thomas Henry, as written in his autobiography at the Moorland-Spingarn Research Center at Howard University, is largely that portion which took place in Washington and Frederick counties. In 1809, he was apprenticed to a white blacksmith, and guaranteed freedom at age twenty-one by the terms of the will

of the slaveholder, Richard Barnes. Henry converted from Catholicism in 1819, while working for Abraham King, a member of the United Brethren, or Dunkers. The Brethren were a pacifist and antislavery group, originally German immigrants, who are still present in the area. Henry followed the King children into the Methodist Episcopal Church, where he became an exhorter.

In 1835 he associated with the African Methodist Episcopal Church as a licensed minister. He was ordained an Elder in 1838 (Payne [1891]1969,121). His first AME appointment was in Frederick, at Bethel Church, which had fifteen members. His second was in Hagerstown, where he established the Ebenezer AME Church.

Thomas Henry supported himself working at the furnaces, quarrying rock and chopping wood, when he could not make ends meet as a minister whose congregation was primarily slaves. He also knew the art of traditional medicine, and sold homemade liniments. He married Catherine Craig in Hagerstown, who was enslaved, but promised her freedom at thirty-one after her childbearing years. Henry spent much of this period saving to purchase his wife earlier, and their children born while she was still a slave. The price was raised when he tried to fulfill this transaction with \$900, and he was unable to buy two of his four children. They were sold and he lost all contact.

As one of its members, Henry's Autobiography is a true source of the life of the black community of his time. of his circuit included the Antietam Ironworks community.1 As a former blacksmith, he understood the ironmaking process. He looked at the lives and working conditions of the slave community and wrote what interested him most as a black man and an experienced worker in their The main caution in looking at his story of the field. ironworkers is knowing exactly what time period he relating. Henry had a tendency to jump back and forth in his chronology. Some dating is possible from the residence or deaths of the furnace owners that he names.

By 1820, both Catoctin Furnace and the Antietam Ironworks were owned by the same family, the McPhersons and Briens (called Brinn by Henry). John Brien, who purchased Antietam Ironworks in 1806 from Richard Henderson, and Catoctin Furnace in 1820 with his father-in-law, John McPherson, died in 1834. As Thomas Henry describes the life of the slave ironworkers, he is relating a conversation with John McPherson Brien, who was born at Antietam Ironworks and now had inherited it.

These primary accounts of life at Antietam Ironworks are a microcosm of the history of industrial slavery -- payment for overwork, responsible positions for skilled

¹It is possible Henry served the Catoctin Furnace slave population while in Frederick, but he is specific only about the Antietam Ironworks group in his *Autobiography*.

slaves, and increasing interracial animosity. One aspect of his description of the Antietam Ironworks group is the role of the wives of the slaves, many of whom were free:

... Mr. Brinn told me that he had a very fine set of young men there to work and attend to his business, and said he, 'I am very glad that you have come among them to teach them the way to live.' He further said that he did not wish anyof his men to marry slave women, and he would rather they should marry free women and bring them on the place, and he would have them there with him, that he might do and care for them as he liked; he stated further, that he had plenty of land and timber to build them houses, just as they wished to have them built; he further gave them more privileges than any white man had on his place; he also offered the men all the refuse from his mills, which was an immense quantity of fuel, which no white man on the premises could disturb, and at any time that his white employees wanted any work done, it should be done by his men's wives, that they might make all the extra money that could possibly be made, and to encourage his own slaves, he gave them their tasks -- all over their tasks they were paid for, just as free men were paid for their labor, and on Saturday night every man would be seen waiting for his pay, just as all the other hands were being paid. (1872, 25)

Corroboration of the ironworkers marriage to free women is evident in a comparison of the censuses of 1830 and 1840, in which the free women of color in the vicinity increase from one to nine. The significant economic role of these women in the black and white worker population, with crafts and trading livelihoods, is reminiscent of traditional African life, in which women maintained a trading system and participated in a market economy (Sudarkasa 1981). Construction of the Chesapeake and Ohio Canal in the 1840s provided additional opportunity for trade and small manufacturing.

Thomas Henry described the Antietam Ironworks slave workers in greater detail than any other aspect of his life except for his religious inspiration. He wrote of a fight between black and white workers which he called a "young insurrection:"

He [Brien] had occasion to leave home for several days, and while he was gone the agent and some of the white hands had some words with the colored servants; they wanted to catch them and tie them and whip them. Mr. Brinn exclaimed: 'good God! Thomas, they could never do that as I had never whipped them myself.' This caused a young insurrection. He had a colored man that they called Stuttering Pete, who caught one of the white men and threw him across the mill race.

He then told me that his men could not be taken -and well he might say this, for a more powerful set of men I have never seen. The agent then went up to Sharpsburg, to bring down the militia, and when they arrived the boys had fled to the hills and mountains, and could not be seen. They stayed away from the forge and watched for the return of Mr. Brinn, their master, and when he returned he said to me, 'Thomas, here comes my boys from the mountains and hills, all coming to me like wild cattle.' He authority to told the agent that no man had strike any of his hands, and if they have done anything that conflicts with the law I will settle that myself. He told me that hecalled his men together and settled with them as he thought best. The first cause of this outbreak was, that Mr. Brinn had a very faithful colored man, named James Reeder, who dealt out all the stuff that the puddlers used, and this was a great saving to Mr. Brinn. The white employees did not like this colored man dealing out their stuff. Hence the animosity. He said that all his men were very fine men; but as to young James Reeder, the money was never made to buy him. Mr. Brinn then told me that was his place, and that I could come as often and stay as long as I pleased. He said he had given orders to old James Reeder that, if any of the men misbehaved in my meetings, he would hoop-polp them. From this time I had no trouble during my stay at the Antietam Iron Works. (Henry 1872:26)

Puddling iron was an English technique which was growing in use as the ironmaking-experienced European work force increased with immigration in the 1830s. By pouring the molten iron directly from the furnace into molds and stirring it, puddling eliminated the need for forges, the technological arena of the African-based ironworkers. The quality of the iron decreased, but the quantity exceeded wrought iron. Most forges in Maryland disappeared in the next two decades (Thompson 1976).

The interracial hostility described by Thomas Henry grew as a larger skilled European work force entered the United States. Charlotte J. Erickson, American history professor at Cambridge University, has shown that 1841 emigrants were not primarily rural Irish, as historical belief (based upon poor American immigration records) relies, but included an "overrepresentation" of older British ironworkers. The main economic thrusts at this time were textile workers affected by depression in England and those who were seeking a place where they could become landowners (1989,1990).

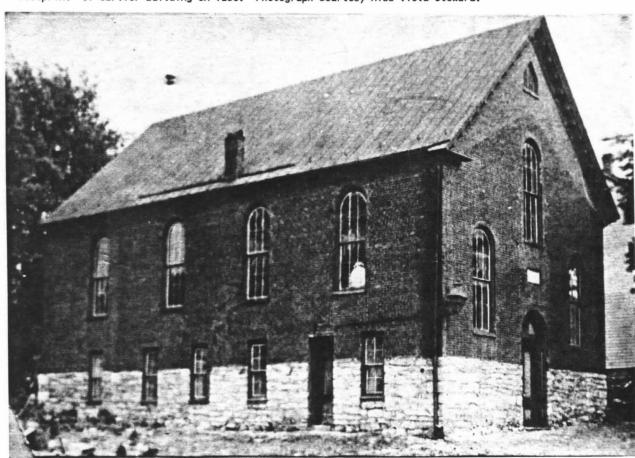
This industrially experienced group indeed demanded preferential treatment based upon race at furnaces and other facilities where skilled slaves and free blacks worked. At the Tredegar Iron Works in Richmond white puddlers refused to train black apprentices (Starobin 1978,54).

Figure 13. Washington County views of Rev. Thomas W. Henry



Antietam Ironworks Bridge, 1991. (restored) The millrace where Stuttering Pete threw the harassing workman is directly behind the bridge.

Ebenezer AME Church in Hagerstown, c. 1898. Original church established by Rev. Thomas Henry in 1840. Note "footprint" of earlier building on face. Photograph courtesy Miss Viola Steward.



JAMES W. C. PENNINGTON, BLACKSMITH - MINISTER

The author of The Fugitive Blacksmith, which was the autobiography of his escape from slavery in 1827 at a farm a few miles from the Antietam Ironworks, was among the most famous black leaders of the antebellum period (Pennington [1850]1971; Blackett 1986; Swift 1989). J.W.C. Pennington became a Presbyterian minister and a leader in the black convention movement which sought to redress racial grievances in a democratic format. He was the first published African American historian on African origins and civilization (Pennington [1841]1969). He completed the course of study at the Yale University School of Divinity without being permitted to participate in classes or borrow books from the library (Blackett 1986:10).

Pennington (formerly Pembroke) was apprenticed to a slave blacksmith at the wheat farm of Frisby Tilghman in the Hagerstown suburb now known as Tilghmington, as a youth in 1820. The literary strength of his antislavery message and the excitement of the story of his successful escape from slavery in his narrative obscure some important points -- his African identity and self-congruity.

Bazil Pembroke, Pennington's father, was the son of an enslaved Mandingo chief. He was skilled in African crafts and made baskets and other goods at night which were sold within the slave community. Both his parents were born in Maryland and were fortunate enough to persuade Tilghman, who inherited

the mother and children, to purchase Bazil when he moved from the Eastern Shore to western Maryland. This was the extent of their fortune in slavery, as Tilghman was a physically harsh slaveholder and vindictive to the family after James escaped in 1827.

As difficult as his decision was to leave his family, with the likelihood of never seeing them again, the blacksmith James Pennington was bound as well by the love of his work:

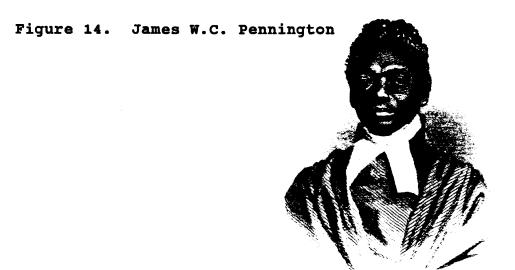
My blacksmith's pride and taste was the one thing that had reconciled me so long to remain a slave. I sought to distinguish myself in the finer branches of the business by invention and finish; I frequently tried my hand at making guns and pistols, putting blades in penknives, making fancy hammers, hatchets, sword-canes, &c &c. ([1850]1971:8)

He was firmly acculturated in his work as part of his African heritage; in A Text Book on the Origin and History of the Colored People, which Pennington wrote in 1841, the history of ironmaking in Africa is part of the story. It is likely that he learned this from his father, and from Africans on the Tilghman farm whom he mentioned by name in his autobiography. The viewpoint he expressed, with an emphasis on Egypt, is the same used today by African and African American scholars (Diop 1974).

The stories of these Washington County, Maryland blacksmiths who became ministers are good examples of issues facing African Americans in the 19th century. Thomas Henry was one of an egalitarian faction in the AME Church in 1843

that voted to allow itenerant and illiterate ministers to become elders and deacons. Although in the majority, this was overuled by Bishop Morris Brown in an important decision which had permanent influence on the historic intellectual leadership of black ministers (Payne [1891]1969,155-156).

Black ministers became teachers, at Sunday schools, in which many black adults and children learned to read in the urban north. James W.C. Pennington was part of this intellectual tradition of the ministry.



James W.C. Pennington lithograph from Wilson Armistead, <u>A Tribute for the Negro</u>. Miami: Mnemosyne, 1969

RESISTANCE TO SLAVERY BY AFRICAN AMERICAN IRONMAKERS

The slaveholder chased James Pennington all the way to Philadelphia with advertisements for a \$200 reward for his return (Blackett 1986,4). As an artisan blacksmith, he was in the most monetarily valuable class of slaves. This must be taken into consideration when looking at the high number of

blacksmiths and iron furnace workers who are the subjects of runaway slave advertisements in recent compendiums. Owners were more likely to spend money for the return of hard-toreplace skilled workers.

The methods used to recapture runaway slaves are exemplified in the experience of James Pennington. The use of handbills previous to newspaper advertisements was common; within a week those would follow the expected route. When that was unsuccessful notices in newspapers followed the fugitives' trail. They also clustered around known points of departure, such as Annapolis, Philadelphia, or Alexandria. Therefore many Virginians were advertising in The Maryland Gazette and Marylanders in The Pennsylvania Gazette (Windley 1983; Smith and Wojtowicz 1989). R.J.M. Blackett traced the advertisements for James Pennington in 1827 through small towns in Pennsylvania before the slaveholder put them into papers in Philadelphia (1986,4).

The number of iron-related fugitives -- blacksmiths and workers at specific forges -- is startling at nearly 10% in the Maryland Gazette (Windley 1983), four and one-half

¹Pennington was able to purchase himself for \$150 from the Tilghman estate in 1850. When his brother and two nephews escaped from a Sharpsburg (MD) slaveholder in 1854 and came to Pennington in New York but were recaptured, he sent \$1375 (two years' salary) for his brother's release. His nephews were sold to slave drivers (Swift 1989, 264).

times their number in the general population. A study by Foner and Lewis of runaway advertisements in *The Virginia Gazette* of this period revealed 5% (more than twice their representation) in forges, mines and ropewalks. Skilled workers comprised 32% of fugitives in the Virginia listings (1978). The data for fugitive white indentured workers is equally strong in this area. David Skaggs found half the advertisements for white runaways mentioned skills, and iron furnaces predominated as the location (1973,58).

Gerald Mullin, in Flight and Rebellion; Slave Resistance in Eighteenth-Century Virginia, argues that these skills represent assimilation to the Anglo American culture, and that the common denominator for success as artisan slaves and self-liberation was proficiency in the English language: "Using the criteria for cultural change -- the slave's task, facility in speaking English, and a distinctive 'sensible' demeanor (itself a function of his clear and fluent English)" (1972,89). Mullin states that the more a slave became like the master, the more likely he was to resist slavery. For the artisan, mobility "diminished his fear of whites and their world by narrowing the difference between him and free men." English provided a means of "understanding the nuances and shades of meaning ... of colonial society" (1972,90-91).

The slave population for Maryland and Chesapeake Virginia is estimated at 203,500 in 1790 (Kulikoff 1986). Ironworking slaves in this population numbered about 4500 (Lewis 1979).

The interpretive issue is that English is regarded as the exclusive purview of its originators -- others adapted to it rather than changing it together to a common cultural tongue. In a devastating criticism by Manthia Diawara, this is called "Englishness ... the privileging of a certain use of language, literature, ideology, and history of one group over populations that it subordinates to itself" (1990,830).

Englishness negates the contributions of cultures other than Anglo American in the common language spoken today in America. Words and ideas originating in Africa, as well as those of American Indians and other Europeans, entered the common English spoken among all Americans (Dillard 1972; Vass 1979).

African languages flourished in Black English, or Ebonics, in the words of Amiri Baraka in Blues People:

It is absurd to assume, as has been the tendency, among a great many Western anthropologists and sociologists, that all traces of Africa were erased from the Negro's mind because he learned English. The very nature of the English the Negro spoke and still speaks drops the lie on that idea. (1963,9)

The self-congruity that an African American achieved by practicing a craft, living in a community that was similar to those in remembered African culture, especially being regarded as part of an occupational group from without and within the slavery environment, formed the ethos of personal and group identity. From this strength, the group helped the individual resist slavery. Leave-taking was accomplished only with the

help of other slaves, which put them in great danger. It was far more than facility with English, or even knowing the enemy, which made the artisan slave a successful runaway.

Fugitives from slavery who are examples of this cultural strength appear in 19th century notices involving the specific ironworks of this study. Jack, a joiner hired to John Brien to work at the mill at Antietam Ironworks, left in May 1807. He played well on the violin and spoke German. Dick, in 1810, left the Fort Frederick iron furnaces area and was aided ("lurking about") by the community at Roger Johnson's forge and furnace (Frederick Town-Herald, June 27, 1807; June 23, 1810). Two black men surnamed Adams, both nearly six feet tall, left Catoctin Furnace together in 1822 (Wright 1987,69).

CATOCTIN FURNACE AND ANTIETAM IRONWORKS SLAVE COMMUNITIES

Antietam Ironworks in 1810 had thirty-three slave and twenty-nine free persons of color in the working community managed by John Brien. Brien emigrated from Ireland to work in the Pennsylvania iron furnaces begun by his uncle, Robert Coleman, around the time of the American Revolution. He married Harriet McPherson in Frederick, Maryland, in 1804. With her father, John McPherson, they purchased Antietam Ironworks in 1806 and began their family enterprise. John Brien moved to Antietam with his wife and remained until 1817,

when they returned to Frederick. McPherson and Brien purchased Catoctin Furnace in 1820 (Anderson 1985).

Instability of furnace ownership as the revolutionary generation grew old brought marked changes to the slave communities. By the terms of their wills, slaves were distributed to wives and children rather than sold with the facilities.

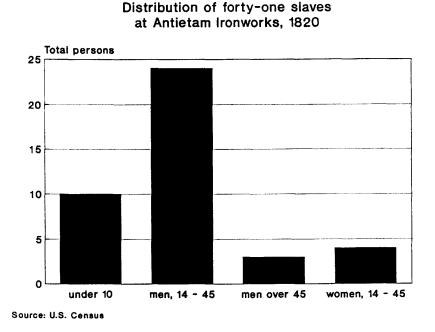
The furnaces and forges were sold first, then sales by the heirs of small groups of slaves regularly appear in the Frederick Town-Herald. James Johnson, son of James the furnace-builder, advertised "valuable slaves, consisting of men, women and children" sold only "to humane masters who will not sell them out of the state" (March 7, 1818).

Forty-seven slaves working at furnaces in Frederick County in 1810 were divided among three known managers of facilities in the Catoctin Furnace and Bush Creek Forge area. Baker Johnson was nearby with twenty-one, his steady working community. The free population of "all others" has grown in the vicinity. Some are relatives of Mr. Colimer.

The census of 1820 was the first to be distributed by age and gender for everyone who was counted. This was a time of economic depression in the area which affected Washington County more than many other areas (Boles 1979).

James Johnson died in 1809; Baker in 1811; Thomas in 1819; Roger in 1831. Joshua Johnson died young; his children raised by his brothers. A daughter, Louisa, married John Quincy Adams in 1797 (Challinor 1985).

Figure 15. Slaves at Antietam Ironworks in 1820.



Defining the Catoctin Furnace slave population using data in the census of 1820 raises more questions than answers. Two sons of Baker Johnson are in the area with the same number and gender of slaves they inherited in 1811, given a plusminus of two in the youngest and oldest categories. These slaves, and those of James Johnson (son of James the furnace builder) are all listed as engaged in agriculture. The 1820 census has several new categories, including the number of people engaged in agriculture or manufacture.

¹Some names are recognizable from eighteenth century sales to the Johnson brothers: Old Jack, Old Will, Priss.

It appears a complete break was made in the slave community of Catoctin Furnace during this era. Some, the slaves of the Johnsons, remained in the area, but at other types of work. The only slaveholder who is engaged in manufacture in the area in 1820 was a man named Samuel Lain. He has a young woman and her child as slave workers for a group of twenty-six white men, eight of whom are in another new census category -- "foreigners."

After 1820 both the Catoctin Furnace and the Antietam Ironworks were owned by McPherson and Brien. This provided the opportunity to bring skilled workers from Antietam to Catoctin if considered necessary. Again distributed by age and gender, the 1830 census shows an abnormal young population at Antietam Ironworks. Of thirty-five slaves, there was only one (elderly) man over forty, and no women between the ages of twenty-six and fifty-five. (See Table 5.1) Slaves were increased by addition of young males and females, corroborated by records of four teenagers purchased by McPherson and Brien in the 1820s. The unusual group may also be the showing the effects of an 1830 cholera epidemic (Grant Conway Collection).

Four teenage children and a woman of forty-three were purchased from Peter Eichelberger and from Otha Sprigg, a dealer who bought unclaimed suspected fugitives who were jailed and had no papers. The sales in 1818, 1820, and 1821 were found in Frederick County records by Elizabeth Anderson.

It was John Brien the elder whom Rev. Thomas Henry stated made a place for him to preach, which John McPherson Brien continued at the Antietam Ironworks. The interest of the Briens in religious education of the workers at both furnaces is also attested in missionary diaries of whites. The Moravians were still holding services at Catoctin Furnace in 1827; Rev. Samuel Reinke noted the advanced age of some of the black workers (Oerter 1913; Anderson 1985). John Alex Adams reported to the Episcopal Convention in 1830 on the large room at Antietam Ironworks where "services of the church have been regularly performed and a coloured congregation have regularly been attended to."

The following tables of the two furnace slave populations in 1830 and 1840 show the effect of the death of John Brien in 1834. One son, John McPherson Brien, managed the Antietam Ironworks. Another, Henry A. Brien, struggled to maintain Catoctin Furnace but could not. John McPherson Brien bought Catoctin Furnace from his father's estate (Brien left no will) but was forced to sell it within two years due to economic hardship (Anderson 1985,17-18).

¹ The Episcopal Church records were also gathered by Catoctin Furnace historian Elizabeth Anderson.

Table 5.1 Age and gender distribution of slaves at Antietam Ironworks, 1830, 1840

					26 - 35 male female		36 - 55 male female		over 55 male female	
1830 n=35	8	8	9	4	0	5	0	0	1	0
1840 n=50	6	4	7	6	8	8	6	0	5	0

Source: U.S. Census

Table 5.2 Age and gender distribution of slaves at Catoctin Furnace, 1830, 1840

		er 10 female		- 25 female		- 35 female		- 55 female		er 55 female
1830 n=36	6	5	11	2	4	3	3	2	0	0
1840 n=13	0	0	1	4	2	0	3	0	0	3

Source: U.S. Census

A natural extension of the group ethos of the slave workers was collective bargaining. Payment for overwork that was common for industrial slaves certainly did not occur by unilateral good will of the owners; it was good business due to collective expectation and response.

Group action occurred in the insurrection related by Thomas Henry, when the men stayed together in the hills and returned to state their grievances about the agent to the furnace owner. This group showed its self-esteem when the workers tried to negotiate with John McPherson Brien for their release from slavery when the Antietam Ironworks was bankrupt in 1848. Brien accused them of "gross ingratitude ... it would be circus loss to me if they leave this place for Pennsylvania." The slave community of forty-nine people were sold for debts (Thompson 1976:90-91).

Table 6. Forty-nine slaves held by John McPherson Brien sold in 1848.

Abram	Lang, wife and three children
Peter	John Porty
Jim	John Sawyer
Grafton	Stephen
Bill	Gerry
Lexius	Yellow Bill, wife, and four children
Yellow John	Marge and two children
Harry	Alex, Amey and three children
Lloyd	Stacy and two children
Lucy	Jim and two children
Thomas	Jacob and wife
Jack	Nace, wife and two children
Charles	•

Source: Michael D. Thompson: The Iron Industry in Western Maryland. 1976.

The community of workers in Census District 2 in Washington County in 1850 bears the story of this sale. There were as many free people of color as slaves.

People lived near relations. Virtually all the people of color lived in separate households of a husband and wife and children. Generally families designated Black were clustered, as were those called Mulatto. The evidence of the multiracial group as the pool of free women whom lack workers at Antietam Ironworks could marry is corroborated by this census. Familes of more than one racial designation generally show the father as Black. There are more Black than Mulatto identifications in the total group; it is unknown whether the household members or the census taker (who was certainly white) made the racial identifications.

Most of the people of both racial designations are listed as day laborers. Some other occupations of people of color are blacksmith and farmers, masons and shoemakers. One notable family were the Reeders, called Mulatto. They were coopers who lived next to a White family of the same name. There is no James Reeder (or Reader) listed, the slave of whom Rev. Thomas Henry wrote managing supplies at Antietam Ironworks in the 1830s. There are ten households with the surname "Colamer" among the multiracial people in this census district. Descendents of some of these Black and multiracial families attend the Mt. Mariah Baptist Church in Garrett's Mill (interviews 1979,1991).

The absence of slaves at Catoctin Furnace seen in 1840 (Table 5.2) continued in the 1850 census for Frederick County, when Census District 4 had a free population of color of 150 persons and 93 slaves. This is compared with over 300 in each category in Washington County.

Catoctin Furnace does not have a continuing black community as that of the Antietam Ironworks, or at Green Spring and Fort Frederick, who built AME Church. Researchers at the Maryland Department of Natural Resources speculate that the slave workers at Catoctin Furnace may be among 294 persons who went to Liberia from Maryland, as Catoctin Furnace owner John McPherson had been the local treasurer for the Maryland Colonization Society in 1831. James Wesley Smith (1987) lists 308 persons from Maryland as emigrants to Liberia, including twenty blacksmiths. McClelland and Zeckhauser state 1,227 former slaves from Maryland settled in Liberia (1982,128).

Clearly, the Maryland African emigration experience needs additional research concentrating on the African American component as Penelope Campbell does for the white leadership of the Maryland Colonization Society (1971). It is noteworthy for this study that not only McPherson, but a relative of Benjamin Blackford, the owner of Catoctin Furnace during the War of 1812, was active in African colonization and even went to Liberia himself in 1837 (Blackford 1954).

¹Fundraising efforts began this year to make this church a museum of black culture in western Maryland (Prejean 1991).

AFRICAN AMERICAN IRONWORKERS' DIASPORA

The 1840s saw the end of the charcoal ironmaking industry in America. Its demise was signaled by the bankruptcies of business and closing of forges as new techniques made wrought iron a technique of the past. Europeans who knew the methods of anthracite fuel, which had been used in England since the 1780s, made this conversion possible.

The changes required for the new technology were significant. Historical archaeologist John D. Light suggests: "The general blacksmith of 1800 probably had more in common with his ancestor of 1,000 years than he did with his direct descendent of 100 years." He notes the traditional techniques of smiths in Africa were more like those used in America in 1800 than the changed methods required of smiths due to new technology (1977,662).

African American blacksmiths who were able to leave slavery continued to practice their craft. Young urban free blacks were assisted in Maryland by apprenticeships to skilled trades by the Orphans Court, although the intent was to provide cheap labor for whites. The historic study by James Wright shows that, as the free population of color in Baltimore grew, the men were "most prominent in barbering, blacksmithing, and caulking," retaining a significant portion of the blacksmith needs of the city for a long period (1921,155).

Blacksmiths in Philadelphia in the 1856 Pennsylvania Abolition Society census were from Maryland, Delaware or Washington DC. In a comparison of occupations among free-born blacks and former slaves, Theodore Hershberg found that more blacksmiths and metal-workers were among ex-slaves (1975,410).

Growing animosity in race relations during the 1830s and 1840s is a frequent topic in labor histories. A wage differential based on race appeared in Pennsylvania during this period, whereas previously wages were based upon the job performed (Walker 1969).

W.E.B. DuBois stated in The Ante-Bellum Negro Artisan that whites rioted in Philadelphia objecting to skilled blacks obtaining jobs in the city. This pressure was enacted into racial preference laws in Maryland and Pennsylvania (DuBois [1902]1975b,178). DuBois also noted the tradition of ironmaking excellence in Africa in The African Artisan. He blamed the disruption it caused as devasting the industries of the people ([1902]1975a,172).

Wherever there are descendents of African ironworkers, the univeral pride of workmanship is readily remembered. The author Margaret Walker learned her grandfather in Georgia was a blacksmith who owned a shop in the late 19th century (1990). Philip Simmons, Charleston, South Carolina blacksmith, continues apprenticing young men to the old art (Vlach 1981; James Knox interview 1985). Cinematography winner of the 1991 Black Filmworks Festival, Daughters of the Dust (Dash 1990),

included a scene of blacksmithing in the Sea Islands; director Souleymane Cissé portrayed it for traditions of the Bambara in Mali (1987). Whether artists in wrought iron, or those artists who cook with "heavy black cast-iron pots that are the leitmotiv of Black cooking" (Harris 1989), the ethos of African knowledge is a patina that will not be removed.

CONCLUSIONS

Transfer of technological techniques of African ironmaking occurred when slave workers were charged with making iron in the 18th century. Slaves were placed at work at forges, which more closely approximated the African iron experience than furnaces. Charcoal technology, which matched the experience of Africans, remained operative in furnaces which used slave labor longer than those which did not. When the technological transition to European methods occurred, African Americans often met with racial discrimination for work, whether free or slave.

The occupational clan and elite characteristics of this group as slaves in America reinforced the similar African traditions. Access to money made the ironworkers in America more able to purchase freedom for themselves and their children. They actively resisted slavery as a group. Fugitives from slavery had more opportunity for success in the North because of their ironmaking skills and their inner strength due to cultural self-congruity.



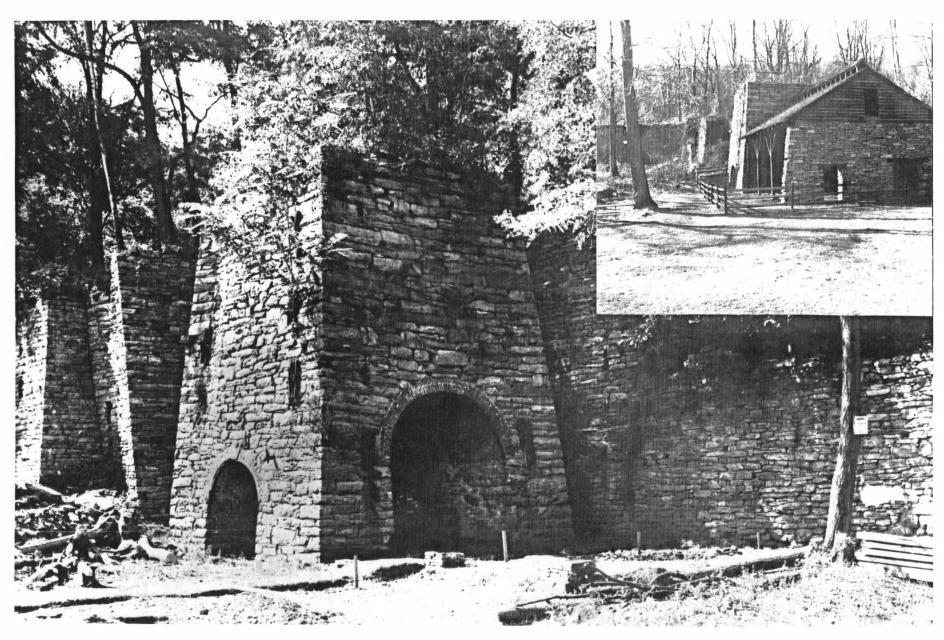


Catoctin Furnace present-day views.

The furnace hearth, where the slaves of James Johnson heard devotions by a Moravian minister until the signal to return to pouring the iron.

This crumbling wall was the site of manufacturing stoves and cast iron pots. The high level of lead in the women buried in the Catoctin Furnace cemetery (on the hill just above the wall) suggests occupational specialization.





The ruins of Catoctin Furnace in the 1930s. Brinton Collection, Hagley Museum and Library of Technology, Wilmington. INSET: Catoctin Furnace National Historic Site, 1991.

APPENDIX 2.

INTERVIEWS

Elizabeth Anderson	Thurmont, MD	January	1991
Joel Anderson	Thurmont, MD	January	1991
Joe Beaner	Garrett's Mill, MD	January	1991
L. Dean Calimer	Hagerstown, MD	January	1991
Leonard W. Curlin	Hagerstown, MD	1979 -	1991
John C. Frye	Hagerstown, MD	1977 -	1991
Susan Winter Frye	Harpers Ferry, WV	May	1988
Jennifer Olsen Kelley	Silver Springs, MD San Diego, CA	May April	1988 1989
James Knox	Charleston, SC	June	1985
Ann Lebherz	Frederick, MD	May	1988
Linda McCurdy	Durham, NC	January	1991
Ronald Orr	Annapolis, MD	January	1991
Stephanie Pinter	San Diego, CA	April	1989
Lesley Rankin-Hill	San Diego, CA	April	1989
Helen Schenck	Philadelphia, PA	January	1991
John C. Snowden	Harpers Ferry, WV	May	1981
Michael Stewart	Philadelphia, PA	January	1991
Ronald Thomas	Newark, DE	January	1991
Michael D. Thompson	Charles Town, WV	June	1985
William Theriault	Shepherdstown, WV	January	1991
Peter Weil	Newark, DE	January	1991

AFRICAN AMERICAN AUTOBIOGRAPHIES

- Curtin, Philip D., ed. 1967. Four nineteenth century Nigerians. In Africa remembered; narratives by West Africans from the era of the slave trade. Madison: University of Wisconsin Press.
- Equiano, Olaudah. 1985. Traditional Ibo religion and culture. Chap. 1 In Afro-American religious history; a documentary witness., ed. Milton G. Sernett. Durham: Duke University Press. From The Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, the Africa, Written by Himself. 1791.
- Henry, Thomas W. 1872. Autobiography of Rev. Thomas W. Henry of the AME church. Baltimore: n.p. Original at the Moorland-Spingarn Research Center, Howard University.
- Jefferson, Isaac. 1951. Memoirs of a Monticello slave; as dictated to Charles Campbell in the 1840s by Isaac, one of Thomas Jefferson's slaves., ed. Rayford Logan. Charlottesville: University of Virginia Press.
- Pennington, James W. C. 1971. The fugitive blacksmith; or, events in the history of James W. C. Pennington, pastor of a Presyterian church, New York, formerly a slave in the state of Maryland, United States. 3rd ed. Reprinted from 1850 edition. Westport: Negro Universities Press.
- Snowden, Rev. John Baptist, Rev. Thomas Baptist Snowden, and Houston D. Snowden. 1980. From whence cometh. New York: Vantage Press.
- Walker, Margaret. 1990. How I wrote 'Jubilee' and other essays on life and literature. New York: The Feminist Press at City University of New York.

Additions to thesis made in September, 2000

The major revision to this 1991 thesis is the firm identification of quartz pieces in the coffins of the Catoctin Furnace burials as African symbols of power. In 1997, I brought a community college African History class to hear Robert Farris Thompson, the Yale University art historian of Africa, speak in Berkeley. He stated, in his powerful and inimitable style, that quartz had been found in coffins in Maryland, and that these were important symbols of honoring a powerful person in Kongo culture. This makes two Africanists (the other Peter Weil of the University of Delaware) who bring a direct connection of African tradition to the ironworks of Maryland.

Crossroads are another important symbol of Kongo culture. Prof. Thompson had one placed at the entrance of the University Art Museum in Berkeley, where it remains.



The influence of Rev. Thomas W. Henry in the community at large is better known due to the finding by Marsha Fuller of the Washington County Free Library of a newspaper article in the *Hagerstown Torch-Light and Advertiser*, November 29 1827:

The Colonizing System

It will be recollected that a few weeks since a Society Auxiliary to the American Colonization Society, was organized in this place. On Monday night last a meeting in furtherance of the views of the Society was held, at the Court-House, at which many gentlemen from the country, in attendance at court, as well as a number of the ladies and gentlemen of the town were present. The object of the meeting was stated by the Rev. Mr. Henry, an Agent of the Society, who, in an address at some length, demonstrated, at least to our satisfaction, the practicability of the scheme, and enforced, by various considerations, the policy of the undertaking. Mr. Henry was followed, in a short address, by the Rev. Mr. Fullerton, who painted, in striking colors, some of the advantages that must result from the accomplishment of the objects of the Society, not only to our own country & to its free coloured population, but to the natives of Africa and the cause of religion. After Mr. Fullerton had concluded, Joseph I. Merrick, Esq. Made a few brief observations previous to submitting for additional signatures a copy of the Constitution, to which several names were added during the evening. The work, in Washington county, may now be considered as being in successful operation.

The role of Rev. Henry, who in 1827 was ordained by the Methodist Episcopal Church (he did not become part of the A.M.E. until 1835), in the American Colonization Society bears examination in light of his being called to assist John McPherson Brien to bring the Antietam ironworks slaves "down from the hills like cattle." In his *Autobiography* (which I edited for publication by the University Press of Mississippi in 1994, Joseph Merrick is noted as a "true friend." Other prominent whites in ACS who were close to Rev. Thomas Henry included John Thomson Mason, the executor of the will of his slaveholder, Richard Barnes, and Francis Scott Key, who became owner of the Barnes home in Leonardtown,

In *The African Colonization Movement 1816-1865* (1961), P. J. Staudenraus notes that colonization split the early A.M.E. Church, when Rev. Daniel Coker of Baltimore, a founder with Richard Allen, emigrated to Sierra Leone in 1820. In 1827, twenty auxiliaries were added. This article is evidence that one was in Hagerstown. Some auxiliaries then broke away from the ACS in 1831, forming the Maryland Colonization Society. A study by Penelope Campbell, *Maryland in Africa: The Maryland State Colonization Society 1831 - 1857* (1971) does not include Rev. Thomas Henry or Joseph I. Merrick. It does include Catoctin Furnace owner John McPherson, who died in 1833. It is his grandson who was the owner at the ca. 1836 "young insurrection."

In examining the records of the Amerian Colonization Society in Annapolis in 1998, there is a strong connection of Caspar Wever, the B & O President and founder of Weverton, a community of free black railroad workers for whom Rev. Thomas Henry, as stated in his *Autobiography*, is pastor. A large family of these workers, the Davenports, emigrate to Liberia in 1837. Without naming them, Henry clearly describes this family in his ministry.

The ACS agent in Liberia at this time is John B. Russwurm, co-editor of the first African American periodical in the United States, *Freedom's Journal*. For Rev. Coker, John Russwurm, Lott Cary, and other free black leaders of the 1820s and 1830s, emigration to Africa was a goal that had much more appeal than to later intellectuals and religious leaders. We must consider that this was a possible outcome for some of the ironworks population at mid-Maryland furnaces.

End of additions to thesis, September, 2000. Created for "Millenium Crossroads: A Conference on the History of Mid-Maryland", sponsored by Frederick Community College, the National Park Service, and the Historical Societies of Frederick and Washington Counties.

THE AFRICAN ORIGINS OF CHESAPEAKE AND SOUTH CAROLINA CAPTIVES IN THE 18TH CENTURY

Chesapeake (Virginia, Maryland)

Port of Origin (may not be area of birth)

African Cultures in area

Bight of Biafra 60% (1718-26) 40% (1728-39)	
Angola 5% (1718-26) 41% (1728-39)	
Gold Coast 13% (1718-26) 5% (1728-39)	
Senegambia 4% (1718-26) 10% (1728-39)	
Madagascar 9% (1718-26) 0% (1728-39)	
Windward Coast 7% (1718-26) 0% (1728-39)	
Sierra Leone 1% (1718-26) 0% (1728-39)	
unknown origins 3% (1718-26) 34% (1728-39) ¹	

Yoruba, Ibo, Edo, Bamileke Bakongo, Ovimbundu Akan, Asante, Dagomba, Ewe Mande, Dogon, Wolof, Fulani Malay, Merina Sherbro, Kru, Mandingo, Gola Mano River, Mende, Temne

South Carolina

African Culture Clusters (between 1700 and 1808) and corresponding geographical areas

Mande -- 25%
Mano River -- 7%
Akan -- 11%
Niger Delta -- 1%
Bakongo/Bantu -- 11%
Ovimbundu/Bantu -- 28%²

Senegambia Sierra Leone Ghana, Togo, Benin Ibo, Yoruba Kongo Kingdom Angola, Congo (Zaire)

Data compiled by Jean Libby, Instructor 12/95

Allan Kulikoff, Tobacco and Slaves: The Development of Southern Culture in the Chesapeake, University of North Carolina Press, 1986, p. 322.

Joseph E. Holloway and Winifred K. Vass, The African Heritage of American English, Indiana University Press, 1994, p. xxvii.

REFERENCES

- Abraham, W. E. 1962. The mind of Africa. Chicago: University of Chicago Press.
- Ajayi, J. F. Ade. 1967. Samuel Ajayi Crowther of Oyo. In Africa remembered; narratives by West Africans from the era of the slave trade., ed. Philip Curtin. Madison: University of Wisconsin Press.
- ----- 1989. Africa at the beginning of the nineteenth century: issues and prospects. Chap. 1 In General History of Africa. Vol.6, Africa in the nineteenth century until the 1880s., ed. J.F. Ade Ajayi. Published for UNESCO. Berkeley: University of California Press.
- Ajayi, J. F. Ade, and Ian Espie, eds. 1965. A thousand years of West African history; a handbook for teachers & students. Ibadan: University of Ibadan Press.
- Anderson, Elizabeth Y. 1985. Faith in the furnace; a history of Harriet chapel, Catoctin Furnace, Maryland.
 Thurmont, Md.: Published privately.
- Anquandah, James. 1981. Excavation at the smiths' quarter of Begho, Ghana -- preliminary report. West African Journal of Archaeology 11:131-44.
- Anstey, Roger. 1975. The volume and profitability of the British slave trade, 1761-1807.

 See Engerman and Genovese, eds., 1975.
- Aptheker, Herbert. 1959. The colonial era. New York: International Publishers.
- ----- 1968. American Negro slave revolts. New York: International Publishers. Original edition 1943.
- Arens, W., and Ivan Karp, eds. 1989. Creativity of power; cosmology and action in African societies. Symposium of the African Studies Association, 1981. Washington DC: Smithsonian Institution.

- Armistead, Wilson. 1969. A tribute for the Negro: being a vindication of the moral, intellectual, and religious capabilities of the coloured portion of mankind; with particular reference to the African race. 2nd ed. Reprint of original 1848 edition published in Manchester, England. Miami: Mnemosyne Publishing.
- Armstrong, Douglas V. 1990. The old village and the great house: an archaeological and historical examination of Drax Hall Plantation, St. Ann's Bay, Jamaica. Blacks in the New World Series. Urbana: Univ. of Illinois Press.
- Armstrong, Robert G. 1955. The Idoma-speaking peoples. In Ethnographic Survey of Africa., Peoples of the Niger-Benue confluence. Western Africa. Part 10. London: International African Institute.
- Asante, Molefi Kete. 1987. The Afrocentric idea. Philadelphia: Temple University Press.
- Asante, Molefi Kete, and Kariamu Welsh Asante, eds. 1985.

 African culture; the rhythms of unity. Westport:

 Greenwood Press.
- Aufderheide, Arthur C., and others. 1985. Lead in bone III. Prediction of social correlates from skeletal lead content in four colonial American populations (Catoctin Furnace, College Landing, Governor's Land, and Irene Mound). American Journal of Physical Anthropology 66:353-61.
- Austin, Allan D. 1984. African Muslims in antebellum America; a sourcebook. Critical Studies on Black Life and Culture, Vol. 5. New York: Garland Publishing.
- Avery, D. H., and Peter Schmidt. 1979. A metallurgical study of the iron bloomery, particularly as practiced in Buhaya. *Journal of Metals* 31:14-20.
- Awe, Dr Bolanle. 1972. The economic role of women in a traditional African society; the Yoruba example. In The civilization of the woman in African tradition. Meeting organized by the Society of African Culture in Abidjan, July 2-8th, 1972. Paris: Presence Africaine.
- Baer, Werner. 1969. The development of the Brazilian steel industry. Nashville: Vanderbilt University Press.
- Baraka, Imamu Amiri. 1963. Blues people: Negro music in white America. New York: Morrow Quill.

- Barnes, Sandra T. 1980. Ogun: an old God for a new age.
 Occasional Papers in Social Change 3. Philadelphia:
 Institute for the Study of Human Issues.
- Barnes, Sandra T., ed. 1989. Africa's Ogun; old world and new. African Systems of Thought, Charles S. Bird and Ivan Karp, editors. Bloomington: Indiana University Press.
- Bastide, Roger. 1971. African civilizations in the New World. 2nd ed. Translated from the French by Peter Green, with a foreword by Goeffrey Parrinder. New York: Harper & Row.
- Berlin, Ira. 1982. Time, space, and the evolution of Afro-American society. In *The underside of American history.*, ed. Thomas R. Frazier. Vol.1 to 1877. New York: Harcourt, Brace, Jovanovich.
- Berlin, Ira, and Ronald Hoffman, eds. 1983. Slavery and freedom in the age of the American Revolution.

 Perspectives on the American Revolution Series no 3.

 Published for the United States Capitol Historical Society. Charlottesville: University Press of Virginia.
- Betts, Edwin Morris, ed. 1953. Thomas Jefferson's Farm Book.
 Published for the American Philosophical Society.
 Princeton: Princeton University Press.
- Bjorkenstom, Nils. 1985. Prehistoric and medieval iron production. Journal of the Historical Metallurgy Society 19:186-91.
- Blackford, L. Minor. 1954. Mine eyes have seen the glory; the story of a Virginia lady, Mary Berkeley Minor Blackford 1802-1896, who taught her her sons to hate slavery and to love the Union. Cambridge: Harvard University Press.
- Blackett, R. J. M. 1986. Beating against the barriers; biographical essays in nineteenth-century Afro-American history. Baton Rouge: Louisiana State University Press.
- Bohannan, Paul. 1964. Africa and Africans. Garden City: The Natural History Press.
- Boles, John B. 1979. Tension in a slave society: the trial of the Reverend Jacob Gruber. Southern Studies: An Interdisciplinary Journal of the South 18:179-97.

- Bosman, William. 1967. A new and accurate description of the coast of Guinea; divided into the gold, the slave, and the ivory coasts. 2nd ed. Original edition 1705. With an introduction by John Ralph Willis and notes by J.D. Fage and R.E. Bradbury. London: Frank Cass.
- Brinton Collection. Photographs in the Hagley Museum and Library, Wilmington, Delaware.
- Bruns, Roger, ed. 1977. Am I Not a man and a brother; The antislavery crusade of revolutionary America 1688-1788. Foreword by Benjamin Quarles. New York: Chelsea House.
- Bryson, Judy C. 1979. Women and economic development in Cameroon. United States Agency for International Development report, prepared under contract no. RDO 78/8, January 10, 1979.
- Burnston, Sharon Ann. 1981. The cemetery at Catoctin Furnace, MD: the invisible people. Maryland Archeology 17:19-31.
- Campbell, Penelope. 1971. Maryland in Africa, the Maryland State Colonization Society 1831-1857. Urbana: University of Illinois Press.
- Cappon, Lester J., Barbara Bartz Petchenek, and John Hamilton Long, eds. 1976. Atlas of early American history; the revolutionary era 1760-1790. Princeton: Princeton University Press.
- Cassedy, James H. 1969. Demography in Early America; Beginnings of the Statistical Mind, 1600-1800. Cambridge: Harvard University Press.
- Cassimere, Rafael Jr. 1971. "The origins of slavery in colonial Maryland 1730-1800." Ph.D. dissertation, Lehigh University.
- Challinor, Joan R. 1985. 'A quarter taint of Maryland blood': An inquiry into the Anglo/Maryland background of Mrs. John Quincy Adams. Maryland Historical Magazine 80:409-419.
- Chase, Judith Wragg. 1971. Afro-American art and craft. New York: Van Nostrand.
- Cherry, John. 1986. Technology, towns, castles and churches AD 1100-1600. Chap. 4 In Archaeology in Britain since 1945; new directions., eds., Ian Longworth and John Cherry. London: British Museum Publications.

- Cisse, Souleymane, director. 1987. Yeelen (Brightness). A film made in Mali. San Francisco International Film Festival.
- Clark, Ella E. and Thomas F. Hahn, eds. 1975. Life on the Chesapeake & Ohio Canal. Shepherdstown, W. Va.: American Canal Society.
- Cline, Walter. 1937. Mining and Metallurgy in Negro Africa.
 General Series in Anthropology 5. Menasha, Wis., George
 Banta.
- Commons, John R. and others., eds. 1910. A documentary history of American industrial society., Plantation and frontier. Cleveland: Arthur H.Clark.
- Connah, Graham. 1981. Three thousand years in Africa: man and his environment in the Lake Chad region of Nigeria. Cambridge: Cambridge University Press.
- Crapster, Basil L. 1985. Hampton furnace in colonial Frederick county. Maryland Historical Magazine 80:1-8.
- Craton, Michael B. 1975. Jamaican slavery. See Engerman and Genovese, eds., 1975.
- ----- 1988. The African background. In *Dictionary of Afro-American Slavery*, eds., Randall M. Miller and John David Smith. New York: Greenwood Press.
- Crowther, Samuel. 1970. Journal of an expedition up the Niger and Tshadda rivers undertaken by Magregor Laird in connection with the British government in 1854. Missionary Researches and Travels. No. 15. 2nd ed. With a new introduction by J.F. Ade Ajayi. Original edition 1855. London: Frank Cass.
- Curtin, Philip D. 1967. Four nineteenth century Nigerians. In Africa remembered; narratives by West Africans from the era of the slave trade., ed. Philip Curtin. Madison: University of Wisconsin Press.
- ----. 1971. The slave trade and the Atlantic Basin: intercontinental perspectives.

 <u>See</u> Huggins, et al, eds. 1971.
- ----. 1975. Measuring the Atlantic slave trade. See Engerman and Genovese, eds. 1975.
- -----. 1975. Economic change in precolonial Africa; Senegambia in the era of the slave trade. Madison: University of Wisconsin Press.

- Daget, S. 1989. The abolition of the slave trade. Chap. 4 In General History of Africa. Vol 6. Africa in the nineteenth century until the 1880s., ed. J.F. Ade Ajayi. Published for UNESCO. Berkeley: University of California Press.
- Dash, Julie, director. 1990. Daughters of the Dust. Black Filmworks Festival of Film & Video, 1991.
- Davis, Angela Y. 1971. Reflections on the black woman's role in the community of slaves. The Black Scholar 3 (4, December):3-15.
- De Barros, Philip. 1988. Societal repercussions of the rise of large-scale traditional iron production: a West African example. The African Archaeological Review 6:91-113.
- DeCorse, Christopher R. 1989. Material aspects of Limba, Yalunka and Kuranko ethnicity: archaeological research in northeastern Sierra Leone.
- See Shennan, ed. 1989.
- Deetz, James. 1977. In small things forgotten; the archaeology of Early American life. New York: Anchor Books.
- ----. 1988. Material culture and worldview in colonial Anglo-America.
- See Leone and Potter, eds., 1988.
- Delafosse, Maurice. 1931. The Negroes of Africa; history and culture. Translated from the French by F. Fligelman. A combination of Les Noirs de L'Afrique (1921) and Civilizations Negro-Africaines (1925). Washington D.C.:

 Associated Publishers.
- Deloria, Vine Jr. 1970. We talk, you listen; new tribes, new turf. New York: Macmillan.
- ----. 1991. Lecture. Stanford University, Stanford, California. Symposium on Ethnicity, Equity & Environment. April 11-14.
- Denyer, Susan. 1978. African traditional architecture, an historical and geographical perspective. New York:
 Africana Publishing Co.
- Dew, Charles B. 1974. David Ross and the Oxford Iron Works: a study of industrial slavery in the early nineteenth-century south. William and Mary Quarterly 31:189-224.

- Diawara, Manthia. 1990. Englishness and blackness; cricket as discourse on colonialism. *Callaloo* 13:830-44.
- Dick, James, & Stewart Company. 1773-1781. Letterbook 1773-1781. Annapolis, Anne Arundel County, Maryland. Manuscripts at Perkins Library, Duke University, Durham, North Carolina.
- Dillard, J. L. 1972. Black English; its history and usage in the United States. New York: Random House.
- Diop, Cheikh Anta. 1974. The African Origins of Civilization: Myth or Reality? New York: Lawrence Hill.
- Donnan, Elizabeth, ed. 1969. Documents illustrative of the history of the slave trade to America. Volume 4. The border colonies and the southern colonies. 2nd ed. Originally published in 1935 by Carnegie Institution of Washington. New York: Octagon Books.
- Dorsett, Todd Andrew. 1984. Daniel and Samuel Hughes, ironmasters along the Antietam. Antietam Ancestors 1:89-93.
- Drake, St. Clair. 1986. Black folk here and there. Vol. 1.
 Afro-American Culture and Society Volume 7. Los
 Angeles: Center for Afro-American Studies.
- DuBois, W.E.B. 1978a. The African artisan. Original 1902. See Newton and Lewis, eds., 1978.
- DuBois, W.E.B. 1978b. The ante-bellum Negro artisan. Original 1902.
- See Newton and Lewis, eds. 1978.
- DuBose, Warner, and Alison Hegameyer. 1985. The zig-zag rockshelter (18FR587) Frederick County, Maryland: preliminary report. Maryland Archeology 21:1-9.
- Dunn, Richard S. 1983. Black society in the Chesapeake 1776-1810.
- See Berlin and Hoffman, eds. 1983.
- Effah Gyamfi, K. 1980. Traditional pottery technology Krobo, Takyman (Techiman) Ghana: an ethno archaeological study. West African Journal of Archaeology 10:103-16.
- Eluyemi, Omotoso. 1989. The archaeology of the Yoruba: problems and possibilities.

 <u>See</u> Shennan, ed., 1989.

- Engerman, Stanley L., and Eugene D. Genovese, eds. 1975.

 Race and slavery in the western hemisphere:quantitative studies. Sponsored by the History Advisory Committee of the Mathematical Social Science Board for the Center for Advanced Study in the Behavioral Sciences, Stanford University. Princeton: Princeton University Press.
- Epstein, S. M. 1981. A coffin nail from the slave cemetery at Catoctin, Maryland. MASCA Journal 1:208-10.
- Equiano, Olaudah. 1985. Traditional Ibo religion and culture. Chap. 1 In Afro-American religious history; a documentary witness., ed. Milton G. Sernett. From The Interesting Narrative of the Life of Olaudah Equiano, or Gustavus Vassa, the Africa, Written by Himself. Originally 1791. Durham: Duke University Press.
- Erickson, Charlotte J. 1989. Emigration from the British Isles to the U.S.A. in 1841: Part I. Emigration from the British Isles. *Population Studies* 43: 347-367.
- -----. 1990. Emigration from the British Isles to the U.S.A. in 1841: Part II. Who were the English emigrants? *Population Studies* 44: 21-40.
- Eyo, Ekpo. 1977. Two Thousand Years Nigerian Art.
 Photographs by Andre and Ursula Held. Lagos, Nigeria:
 Federal Department of Antiquities.
- Fernandez, James W. 1982. Bwiti: An ethnography of the religious imagination in Africa. Princeton: Princeton University Press.
- Fisk University, Nashville. 1968. Unwritten History of Slavery. Original edition 1945. Washington DC: Microcard Editions.
- Foner, Philip S. 1975. History of black Americans from Africa to the emergence of the cotton kingdom. Contributions in American History Series. Westport: Greenwood Press.
- Foner, Philip S., and Ronald L. Lewis, eds. 1978. The black worker; a documentary history from colonial times to the present. Vol. 1. The Black Worker to 1869. Philadelphia: Temple University Press.
- Forbes, Jack D. 1988. Black Africans and Native Americans; color, race and caste in the evolution of Red-Black peoples. Oxford, England: Basil Blackwell.

- Forde, Daryll. 1955. The Nupe. In Ethnographic Survey of Africa., Part 10. Peoples of the Niger-Benue confluence. London: International African Institute.
- Frazier, E. Franklin. 1974. The Negro church in America. 3rd ed. Original published in England in 1963. Published with The black church since Frazier by C. Eric Lincoln. New York: Schoken Books.
- Frederick-Town Herald. June 1802 January 1832. Microfilm, University of Delaware.
- Freyre, Gilberto. 1956. The masters and the slaves; a study in the development of Brazilian civilization. New York: Knopf.
- Frye, Susan Winter. 1984. Archeological excavations at the Antietam Iron Furnace complex (18 WA 288) Washington County, Maryland. Manuscript Series No. 37. Annapolis: Maryland Historical Trust
- ----- 1988. "Charcoal Iron Industry of Maryland Heights." Typescript. Courtesy of the author.
- Fyfe, Christopher. 1964. Sierra Leone inheritance. West African History Series. Includes excerpts from Valentim Fernandes Description de la Cote Occidentale d'Afrique (1506-10). London: Oxford University Press.
- Gates, Henry Louis. 1987. Figures in black; words, signs and the "racial" self. New York: Oxford University Press.
- Genovese, Eugene D. 1972. Roll, Jordan, roll; the world the slaves made. New York: Vintage Books.
- ----- 1979. From rebellion to revolution; Afro-American slave revolts in the making of the modern world. Baton Rouge: Louisiana State University Press.
- Germana, Joseph. 1989. The biological significance of behavioral learning from a systems view. *Behavioral Science* 34 (3):228-37.
- Glaze, Anita J. 1981. Art and death in a Sunufo village. Bloomington: Indiana University Press.
- Gonzalez-Whipper, Migene. 1982. The Santaria experience. Englewood Cliffs: Prentice-Hall.
- Graham, Herbert R., and Ruth Graham. 1981. "Samples Manor or Keep Trieste." Typescript, family history. Potomac, Maryland.

- Grant Conway Collection. Local history of Washington County, Maryland. Western Maryland Room, Washington County Free Library, Hagerstown, n.d.
- Grébénart, Danilo. 1988. Les premiers metallurgistes en Afrique Occidentale. Abidjan: Nouvelles Editions Africaines.
- Haaland, Randi and Peter Shinnie, eds. 1985. African iron working--ancient and traditional. Oslo: Norwegian University Press.
- Hair, P. E. H. 1975. From language to culture: some problems in the systematic analysis of the ethnohistorical records of the Sierra Leone region. In *The population factor in African studies.*, ed. R. P. Moss and J. A. R. Rathbone. London: University of London Press.
- Haley, Alex. 1976. Roots; the saga of an American family. Garden City, N.Y.: Doubleday.
- Handler, Jerome S. 1981. A Ghanian pipe from a slave cemetery in Barbados. West African Journal of Archaeology 11:93-99.
- Handler, Jerome S., Frederick W. Lange, and Robert V.
 Riordan. 1978. Plantation slavery in Barbadoes; an
 archaeological and historical investigation. Cambridge:
 Harvard University Press.
- Harris, Jessica B. 1989. Iron pots and wooden spoons; Africa's gifts to New World cooking. New York: Atheneum.
- Hartride, Walter Charlton. 1943. The refugees from the island of St. Domingo in Maryland. Maryland Historical Magazine 38:103-22.
- Henry, Thomas W. 1872. Autobiography of Rev. Thomas W. Henry of the AME church. Baltimore: privately published.
- Herbert, Eugenia W. 1984. Red gold of Africa; copper in precolonial history and culture. Madison: University of Wisconsin Press.
- Hershberg, Theodore. 1975. Free-born and slave-born blacks in antebellum Philadelphia. See Engerman and Genovese, eds., 1975.
- Hill, Carol W. 1989. Who is what? A preliminary enquiry into cultural and physical identity.

 <u>See</u> Shennan, ed., 1989.

- Hine, Darlene Clark, ed. 1986. The state of Afro-American history; past, present and future. Baton Rouge: Louisiana State University Press.
- Hitzelberger, Mary Fitzhugh and John Philip Dern. 1978.

 Bridge in time; the complete 1850 census of Frederick

 County, Maryland. Redwood City, Calif.: Monocacy Books.
- Hobsbawn, Eric J. 1969. Industry and empire from 1750 to the present day. Harmondsworth, England: Penguin Books.
- Holt, Thomas C. 1987. Of human progress and intellectual apostasy. Reviews in American History 15:50-58.
- Huggins, Nathan Irvin. 1977. Black odyssey; the Afro-American ordeal in slavery. New York: Pantheon
- Huggins, Nathan I., Martin Kilson, Daniel M. Fox, eds. 1971. Key issues in the Afro-American experience. Vol. 1 to 1877. New York: Harcourt Brace Jovanovich.
- Hugill, Peter J., and D. Bruce Dickson, eds. 1988. The transfer and transformation of ideas and material culture. College Station: Texas A & M University Press.
- Hunt, Alfred N. 1988. Haiti's influence on antebellum America; slumbering volcano in the Caribbean. Baton Rouge: Louisiana State University Press.
- Jefferson, Isaac. 1951. Memoirs of a Monticello slave; as dictated to Charles Campbell in the 1840s by Isaac, one of Thomas Jefferson's slaves. Edited by Rayford Logan. Charlottesville: University of Virginia Press.
- Jernegan, Marcus W. 1978. Slavery and the beginnings of industrialism in the American colonies. See Newton and Lewis, eds. 1978.
- Johansson, S. Ryan, and S. Horowitz. 1986. Estimating mortality in skeletal populations: influence of the growth rate on the interpretation of levels and trends during the transition to agriculture. American Journal of Physical Anthropology 71:233-50.
- John Potts/KeepTryst Furnace Collection. 1788-1810. Hagley Museum and Library, Wilmington, Delaware. Manuscripts and Archives Accession no 31.
- Johnson, James. 1972. Family history. Transcription of an 1882 copy of the original letter dated September 1842, Baltimore, by Linda Kemp at the Frederick Historical Society.

- Jones, Anita Elizabeth. 1981. "Captain Charles Ridgely, builder of Hampton Mansion: mariner, colonial agent, ironmaster, and politician." M.A. thesis, Wake Forest University.
- Jordan, Winthrop D. 1968. White over black; American attitudes toward the Negro, 1550-1812. Chapel Hill: University of North Carolina Press.
- Kelley, Jennifer Olsen, and J. Lawrence Angel. 1983. The workers of Catoctin Furnace. Maryland Archeology 19:2-17.
- ----- 1987. Life stresses of slavery. American Journal of Physical Anthropology 74:199-211.
- Kense, Francois J. 1983. Traditional African iron working.
 M.S. thesis, African Occasional Papers No. 1. Calgary,
 Canada: University of Calgary, Dept. of Archaeology.
- ----- 1985. The initial diffusion of iron to Africa. See Haaland and Shinnie, eds., 1985.
- Kessel, Elizabeth Augusta. 1981. "Germans on the Maryland frontier: a social history of Frederick county, Maryland 1730-1800." PhD dissertation, Rice University.
- Kilson, Marion Dusser De Barenne. 1971. West African society and the African slave trade, 1441-1865. See Huggins, et al, eds., 1971.
- Klein, Herbert S. 1971. Patterns of settlement of the Afro-American population in the New World. <u>See</u> Huggins, et al, eds., 1971.
- Klein, Martin A. 1978. The middle passage; comparative studies in the Atlantic slave trade. Princeton: Princeton University Press.
- ----. 1983. African women in the Atlantic slave trade. In Women and slavery in Africa., eds. Claire C. Robertson and Martin A. Klein. Madison: University of Wisconsin.
- Kulikoff, Allan. 1983. Uprooted peoples; black migrants in the age of the American Revolution 1790-1820.
 See Berlin and Hoffman, eds. 1983.
- -----. 1986. Tobacco and slaves: the development of southern cultures in the Chesapeake, 1680-1800. Chapel Hill: University of North Carolina Press.

- Laguerre, Michel. 1989. Voodoo and politics in Haiti.
 London: Macmillan.
- Leone, Mark P. and Parker B. Potter Jr., eds. 1988. The recovery of meaning; historical archaeology in the eastern United States. Anthropological Society of Washington. Washington: Smithsonian Institution Press.
- Lester-Gray Papers. Photographs. Southern Historical Collection, The Library of the University of North Carolina at Chapel Hill.
- Levtzion, N., and J. F. P. Hopkins, eds. 1981. Corpus of early Arabic sources for West African history.
 Cambridge: Cambridge University Press.
- Lewis, Ronald L. 1977. The use and extent of slave labor in the Virginia iron industry: the antebellum era. West Virginia History 38:141-56.
- ----- 1979. Coal, iron, and slaves; industrial slavery in Maryland and Virginia, 1715-1865. Contributions in Labor History Series no 6. Westport: Greenwood Press.
- Libby, Jean. 1978. Reverend Thomas W. Henry of Hagerstown.

 Negro History Bulletin 41:848-49.
- ----- 1979. Black voices from Harpers Ferry; Osborne Anderson and the John Brown raid. Palo Alto, Calif.: Privately published.
- ----- 1986. Mean to be free: John Brown's Black Nation Campaign. film/videotape. Berkeley, Calif.: Educational TV and Radio Studio, University of California.
- Light, John D. 1987. Blacksmithing technology and forge construction. Technology and Culture: 658-65.
- Lupton, Kenneth. 1979. Mungo Park the African traveler. Oxford: Oxford University Press.
- Macaulay, P. Stewart. 1936. The legendary Susquehannocks.

 Pennsylvania Archaeologist 6 (1,April):43-47. Reprinted
 from Baltimore Sun Magazine July 26, 1936.
- Madubuike, Ihechukwu. 1976. A handbook of African names. Washington: Three Continents Press.
- Magubane, Bernard Makhosezwe. 1989. The ties that bind:
 African American consciousness of Africa. Trenton:
 Africa World Press.

- Makinde, M. Akin. 1988. African philosophy, culture, and traditional medicine. Monographs in International Studies, Africa Series no 53. Athens: Ohio University Center for International Studies.
- Marees, Pieter de. 1987. Description and historical account of the gold kingdom of Guinea (1602). Union Academique Internationale Fontes Historiae Africanae, Varia V. New York: Oxford University Press.
- Maret, Pierre de. 1985. The smith's myth and the origin of leadership in central Africa.

 <u>See</u> Haaland and Shinnie, eds. 1985.
- Maryland. Department of Natural Resources. 1976. Research file of a report on a historical survey. Microfilm. Washington County Free Library, Hagerstown.
- May, Earl Chapin. 1945. Principio to Wheeling 1715 1945: A pageant of iron and steel. New York: Harper.
- Mazrui, Ali A. 1974. World culture and the black experience. The John Danz Lectures. Seattle: University of Washington Press.
- McClelland, Peter D. and Richard J. Zeckhauser. 1982.

 Demographic dimensions of the New Republic; American interregional migration, vital statistics, and manumissions, 1800-1860. Cambridge: Cambridge University Press.
- McCurdy, Linda. 1975. "The Potts family industry in the Schuylkill Valley." Ph.D. dissertation, Pennsylvania State University. DAI 1975 (3): 1759-A.
- McIntosh, Roderick J., and Susan Keech McIntosh. 1988. From Siecles obscurs to revolutionary centuries on the Middle Niger. World Archaeology 20:141-65.
- McKusker, John J., and Russell R. Menard. 1985. The economy of British America, 1607-1789. Published for the Institute of Early American History and Culture. Chapel Hill: University of North Carolina Press.
- McNaughton, Patrick R. 1988. The Mande blacksmiths; knowledge, power and art in West Africa. Traditional Arts of Africa Series. Bloomington: Indiana University Press.
- Mitchell, Robert D., and Edward K. Muller, eds. 1979.

 Geographical perspectives on Maryland's past.

 College Park: University of Maryland.

- Mkandawire, N. G. M. 1978. Iron smelting in Malawi. Society of Malawi Journal 31:17-20.
- Morgan, W. B., and J. C. Pugh. 1969. West Africa. London: Methuen & Co.
- Mullin, Gerald W. 1972. Flight and rebellion: slave resistance in eighteenth century Virginia. New York: Oxford University Press.
- Nash, Gary B. 1988. Forging freedom; The formation of Philadelphia's black community, 1720-1840. Cambridge: Harvard University Press.
- Negro's art lives in his wrought iron. 1978. See Newton and Lewis, eds. 1978.
- Newton, James E. 1978. Slave artisans and craftsmen: The roots of Afro-American art.

 <u>See</u> Newton and Lewis, eds., 1978.
- Newton, James E., and Ronald L. Lewis, eds. 1978. The other slaves; mechanics, artisans and craftsmen. Boston: G.K. Hall.
- Nketia, J. H. Kwabena. 1963. Folk songs of Ghana. Legon: University of Ghana.
- Norton, Mary Beth, Herbert C. Gutman, and Ira Berlin. 1983.

 The Afro-American family in the age of revolution.

 See Berlin and Hoffman, eds., 1983.
- Nzewunwa, Nwanna. 1980. The Niger delta; aspects of its prehistoric economy and culture. BAR International Series. S-75, Cambridge Monographs in African Archaeology 1. Oxford: British Archaeological Reports.
- Oakes, James. 1990. Slavery and freedom; an interpretation of the Old South. New York: Alfred A. Knopf.
- Pacey, Arnold. 1975. The maze of ingenuity; ideas and idealism in the development of technology. New York: Holmes & Meier.
- Park, Mungo. 1800. Travels in the interior districts of Africa in the years 1795, 1796, and 1797. 4th ed. London: W. Bulmer & Co. for the author.
- ----- 1983. Travels into the interior of Africa. Original edition 1799. London: Eland Books.

- Park, Robert Ezra. 1964. Race and culture; essays in the sociology of contemporary man. 2nd ed. First edition 1950. Original title The Collected Papers of Robert Ezra Park, Volume 1. New York: Macmillan.
- Parrington, Michael, and Daniel G. Robinson. 1984. The First African Baptist Church cemetery. Archaeology 37:27-32.
- Paskoff, Paul F. 1983. Industrial evolution; organization, structure and growth of the Pennsylvania iron industry, 1750-1860. Studies in Industry and Society Series no 3. Baltimore: Johns Hopkins University Press.
- Payne, Daniel A. 1969. History of the African Methodist Episcopal Church. 2nd ed. Vol. 1. Originally published in 1891. New York: Arno Press and the New York Times.
- Pennington, James W. C. 1969. A text book of the origin and History, &c. &c. of the colored people. Second ed. original edition Hartford: L. Skinner, Printer, 1841. Detroit: Negro History Press.
- ----- 1971. The fugitive blacksmith; or, events in the history of James W.C. Pennington, pastor of a Presyterian church, New York, formerly a slave in the state of Maryland, United States. 3rd ed. Reprinted from 1850 edition. Westport: Negro Universities Press.
- Pescatello, Ann M. 1977. The Afro-American in historical perspective. Chap. 1 In Old roots in new lands., Contributions in Afro-American and African Studies Series no 31., ed. Ann M. Pescatello. Westport: Greenwood Press.
- Pole, L. M. 1982. Decline or survival? Iron production in West Africa from the seventeenth to the twentieth centuries. Journal of African History (Great Britain) 23:503-13.
- ----. 1985. Furnace design and the smelting operation: a survey of written reports of iron smelting in West Africa.
- See Haaland and Shinnie, eds. 1985.
- Porter, James A. 1978. Negro craftsmen and artists of pre-Civil War days.
- See Newton and Lewis, eds., 1978.
- Postma, Johannes. 1975. The origin of African slaves: the Dutch activities on the Guinea coast.

 See Engerman and Genovese, eds., 1975.

- Prejean, Lisa Tedrick. 1991. Built on the foundation of faith. The Daily Mail, Hagerstown MD (1 February): A8.
- Quarles, Benjamin. 1961. The Negro in the American Revolution. Published for the Institute of Early American History and Culture at Williamsburg, Virginia. Chapel Hill: University of North Carolina Press.
- ----. 1969. The Negro in the making of America. 2nd ed. New York: Macmillan.
- ---- 1969. Black abolitionists. New York: Oxford University Press.
- ----. 1974. Allies for freedom; blacks and John Brown. New York: Oxford University Press.
- ----. 1983. The revolutionary war as a black declaration of independence.
- See Berlin and Hoffman, eds., 1983.
- Raimo, John W. 1980. Biographical directory of American colonial and revolutionary governors 1607-1789. Westport, Conn.: Meckler Books.
- Rattray, R. Sutherland. 1969. Hausa folk-lore, customs, proverbs, etc. collected and transliterated with English translation and notes. Vol. 2. Original edition 1913. Westport, Conn.: Negro Universities Press.
- Rawick, George P. 1972. From sundown to sunup: the making of the black community. Contributions in Afro-American and African Studies, no. 11. Westport: Greenwood Press.
- Robbins, Michael Warren. 1972. "The Principio company: iron-making in colonial Maryland, 1720-1781." Ph.D. dissertation, George Washington University.
- Roberts, Richard L. 1987. Warriors, merchants, and slaves; the state and the economy in the middle Niger valley, 1700-1914. Stanford: Stanford University Press.
- Rodney, Walter. 1982. How Europe underdeveloped Africa. With a postscript by A.M. Babu. Washington: Howard University Press.
- Romer, R. F. 1965. The coast of Guinea Copenhagen 1760.

 Part IV. African history, customs and ways of life.

 Typescript monograph, translated for the Institute of African Studies, University of Ghana by Kirsten

 Bertelson, 1965. Copy in the Green Library, Stanford University.

- Rostoker, William, and Bennet Bronson. 1990. Pre-industrial iron: its technology and ethnology. Archeomaterials Monographs 1. Philadelphia: [Rostoker Inc.]
- Rozbicki, Michal J. 1988. Transformation of the English cultural ethos in colonial America; Maryland 1634-1720. Lanham: University Press of America.
- Rustad, John A. 1980. The emergence of iron technology in West Africa. In West African culture dynamics: archaeological and historical perspectives., eds. B.K. Swartz Jr. and Raymond E. Dumett. The Hague: Mouton.
- Salmon, John S. 1986. The Washington iron works of Franklin county, Virginia 1773-1850. Richmond: Virginia State Library.
- Schenck, H. R. 1982. Evidence for a nineteenth century forge at Catoctin, Maryland. *MASCA Journal* (2, Archaeometallurgy): 42-44.
- ----- 1983. Analysis of cast iron from Catoctin, Maryland. MASCA Journal 2:107-11.
- Schenck, H. R., and R. Jr Knox. 1985. Wrought iron manufacture at Valley Forge. MASCA Journal 3:132-41.
- Schmidt, Peter, and Donald H. Avery. 1978. Complex iron smelting and prehistoric culture in Tanzania. Science 201:1085-89.
- Scott, Julius Sherrard III. 1986. "The common wind: currents of Afro-American communication in the era of the Haitian Revolution." Ph.D. dissertation, Duke University.
- Shallenberg, Richard H., and David A. Ault. 1977. Raw materials supply and technological change in the American charcoal iron industry. *Technology and Culture* 18:436-66.
- Shennan, Stephen J., ed. 1989. Archaeological approaches to cultural identity. London: Unwin Hyman, Ltd. Papers presented at the World Archaeological Congress, Southampton, England, September 1986.
- Singleton, Theresa A. 1988. An archaeological framework for slavery and emancipation 1740-1880.

 See Leone and Potter, eds., 1988.
- Sirgy, M. Joseph. 1986. Self-congruity: Toward a theory of personality and cybernetics. New York: Praeger.

- Skaggs, David Curtis. 1973. Roots of Maryland democracy, 1753-1776. Contributions in American History 30. Westport: Greenwood Press.
- ----- 1984. John Semple and the development of the Potomac valley, 1750-1773. The Virginia Magazine of History and Biography 92 (3,July):282-308.
- Skinner, Elliott. 1964. West African economic systems. In Economic transition in Africa., ed. Melville Herskovits and Mitchell Harwitz. Chicago: Northwestern University Press.
- Smith, Billy G., and Richard Wojtowicz, eds. 1989. Blacks who stole themselves: advertisements in the Pennsylvania Gazette, 1728-1790. Philadelphia: University of Pennsylvania Press.
- Smith, Edward D. 1988. Climbing Jacob's Ladder; the rise of black churches in eastern American cities, 1740-1877. Washington: Smithsonian Institution Press.
- Smith, James Wesley. 1987. Sojourners in search of freedom; the settlement of Liberia by black Americans. New York: University Press of America.
- Smith, Merritt Roe. 1977. Harpers Ferry armory and the new technology; the challenge of change. Ithica: Cornell University Press.
- Snowden, John Baptist, Thomas Baptist Snowden, and Houston D. Snowden. 1980. From whence cometh. New York: Vantage Press.
- Sonnenfield, Joseph. 1988. Abilities, skills, competence; a search for alternatives to diffusion. Chap. 10 In The transfer and transformation of ideas and material culture., ed. Peter J. Hugill and D. Bruce Dickson. College Station: Texas A & M University Press.
- Spande, Dennis. 1977. A historical perspective on metallurgy in Africa: a bibliography. Waltham: Crossroads Press. Copyright by the African Studies Association.
- Starobin, Robert. 1970. Industrial slavery in the old South. New York: Oxford University Press.
- -----. 1978. Race relations in old South industries.

 <u>See</u> Newton and Lewis, eds., 1978.

- Stavisky, Leonard P. 1978. The origins of Negro craftsmanship in colonial America.

 <u>See</u> Newton and Lewis, eds., 1978.
- ----- 1978. Negro craftsmanship in early America. See Newton and Lewis, eds., 1978.
- Steady, Filomina C. 1983. Research methodology and investigative framework for social Change: the case for African women. Chap. 2 In Seminar on research on African women: What type of methodology? Dakar, Senegal: Association of African Women for Research and Development.
- Stein, Robert Louis. 1988. The French sugar business in the eighteenth century. Baton Rouge: Louisiana State University Press.
- Stewart, Michael. 1989. The Middle Archaic period in the Great Valley of Maryland. Maryland Archaeology 25 (1, March):1-6.
- Stone, Garry Wheeler. 1984. The Mount Joy forge on Valley Creek. Chap. 5 In The scope of historical archaeology; essays in honor of John L. Cotter., ed. David G. Orr and Daniel G. Crozier. Occasional publication of the Department of Anthropology. Philadelphia: Laboratory of Anthropology, Temple University.
- Stotz, Charles Morse. 1985. Outposts of the war for empire; the French and English in western Pennsylvania: their armies, their forts, their people 1749-1764. Pittsburgh: University of Pittsburgh Press.
- Sudarkasa, Niara. 1981. Female employment and family organization in West Africa. Chap. 1 In The black woman cross-culturally., ed. Filomina Chioma Steady. Cambridge, Mass.: Schenkman.
- Swift, David E. 1989. Black prophets of justice; activist clergy before the Civil War. Baton Rouge: Louisiana State University Press.
- Swift, Jeremy. 1983. New Preface. In Travels into the interior of Africa by Mungo Park. London: Eland.
- Temin, Peter. 1964. Iron and steel in nineteenth-century America; an economic inquiry. Cambridge: MIT Press.
- Theriault, William D. 1989. Friend's Orebank and Keep Triste Furnace. West Virginia History 48:43-60.

- Thomas, Ronald A., and others. 1981. Archaeological data recovery at Catoctin Furnace cemetary, Frederick County, Maryland, January 1981. Appendices to Part 3 of final field report, Archaeological investigations at Catoctin Furnace, Frederick County, Maryland, May 1980. Baltimore: Dept. of Transportation, State Highway Administration.
- Thompson, Michael D. 1976. The iron industry in western Maryland. [Washington County Historical Association, Hagerstown, Md.]
- Thompson, Robert Farris. 1976. Black gods and kings; Yoruba art at UCLA. Bloomington: Indiana University Press.
- ----. 1982. Flash of the spirit; African and Afro-American art and philosophy. New York: Random House.
- Thornton, Russell. 1987. American Indian holocaust and survival; a population history since 1492. Norman: University of Oklahoma Press.
- Tylecote, R. F. 1976. A history of metallurgy. London: Metals Society.
- U.S. Bureau of the Census. Census manuscripts 1790, 1800, 1810, 1820, 1830, 1840, 1850. Frederick County and Washington County, Maryland. Free and slave schedules. National Archives Records Center, San Bruno, California.
- U.S. Bureau of the Census, ed. 1975. Historical statistics of the United States; colonial times to 1970.
 Washington: Bureau of the Census.
- ----. 1990. Statistical abstract of the United States. 110th ed. Washington: Bureau of the Census.
- U.S. Department of the Interior. 1983. A guide to Hopewell Furnace National Historic Site. Washington: National Park Service.
- Van der Mwere, Nikolaas J. 1980. The advent of iron in Africa. Chap. 13 In *The coming of the age of iron.*, ed. Theodore A. Wertime and James D. Muhly. New Haven: Yale University Press.
- Van Sertima, Ivan, ed. 1983. Blacks in science; ancient and modern. New Brunswick: Transaction Books. Copyright by the Journal of African Civilizations Ltd., Inc.

- Vass, Winifred Kellersberger. 1979. The Bantu speaking heritage of the United States. Afro-American Culture and Society Monograph, Volume 2, Special Editor Baruch Elimelech. Los Angeles: Center for Afro-American Studies.
- Vaughn, James H. 1973. Blacksmiths as artists in Marghi society. In *The traditional artist in African societies.*, ed. Warren L. d'Azevedo. Bloomington: Indiana University Press.
- Vlach, John Michael. 1978. The Afro-American tradition in decorative arts. Cleveland: The Cleveland Museum of Art.
- ---- 1981. Charleston blacksmith; the work of Philip Simmons. Athens: University of Georgia Press.
- Walker, James W. St. G. 1975. The black loyalists; The search for a promised land in Nova Scotia and Sierra Leone 1783-1870. Dalhousie African Studies Series. New York: Africana Publishing Co.
- Walker, Joseph E. 1969. A comparison of Negro and white labor in a charcoal iron community. Labor History 10:487-97.
- Walker, Joseph E. 1969. Negro labor in the charcoal iron industry of southeastern Pennsylvania. Pennsylvania Magazine of History and Biography 93:466-86.
- Walker, Margaret. 1990. How I wrote Jubilee and other essays on life and literature. ed., Maryemme Graham. New York: The Feminist Press at The City University of New York.
- Washington, Joseph R. Jr. 1990. The first fugitive foreign and domestic doctor of divinity; rational race rules of religion and realism revered and reversed or revised by The Reverend Doctor James William Charles Pennington. Religion. Lewiston, N.Y.: Edwin Mellen Press.
- Waters, Donald Joseph. 1982. "An 'Empire of Necessity': capital accumulation on West Indian plantations and the problem of artisan manufacturing, 1620-1880." Ph.D. dissertation, Yale University.
- Wesley, Charles H. 1978. Slavery and industrialism. See Newton and Lewis, eds., 1978.

- White, E. Frances. 1982. Women, work and ethnicity: the Sierra Leone case. In Women and work in Africa., ed. Edna G. Bay. Boulder, Colo.: Westview Press.
- White, Lynn Jr. 1962. Medieval technology and social change. New York: Oxford University Press.
- Williams, Denis. 1964. The iconology of the Yoruba edan Ogboni. Africa 37:139-66.
- Windley, Lathan A., ed. 1983. Runaway slave advertisements: a documentary history from the 1730s to 1790. Virginia. Maryland. Vol. 1 and 2. Westport: Greenwood Press.
- Wiredu, Kwasi. 1980. Philosophy and an African culture. Cambridge: Cambridge University Press.
- Wood, Peter H. 1974. Black majority; Negroes in colonial South Carolina from 1670 through the Stono rebellion. New York: W. W. Norton.
- Wright, Bonnie L. 1989. The power of articulation. See Arens and Karp, eds. 1989.
- Wright, James M. 1921. The free Negro in Maryland, 1634-1860. Studies in History, Economics and Public Law Series. New York: Columbia University.
- Yansané, Aguibou Y. 1985. Cultural, political, and economic universals in West Africa. Chap. 3 In African culture and the rhythms of unity., ed. Molefi Kete Asante and Kariamu Welsh Asante. Westport, Conn.: Greenwood Press.
- Zahan, Dominique. 1979. The religion, spirituality, and thought of traditional Africa. 2nd ed. Translated by Kate Ezra Martin and Lawrence M. Martin. Originally published as Religion, Spiritualité, et Penseé Africaines, Paris: Payot, 1970. Chicago: University of Chicago Press.